REPORT NUMBER 154

MARCH 1965

Volume I

ONE-FIFTH SCALE INLET MODEL WIND TUNNEL TEST REPORT

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REPORT NUMBER 154

ONE-FIFTH SCALE INLET MODEL
WIND TUNNEL TEST REPORT
VOLUME I

XV-5A Lift Fan
Flight Research Aircraft Program

Contract Number DA 44-177-TC-715

ADVANCED ENGINE AND TECHNOLOGY DEPARTMENT
GENERAL ELECTRIC COMPANY
CINCINNATI, OHIO 45215

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1.0 SUMMARY

This is XV-5A Report No. 156 , published in three volumes, which presents low and high speed wind tunnel test results for a 1/5-scale inlet model of the U.S. Army XV-5A Lift Fan Research Aircraft. The tests were conducted at the David W. Taylor Model Basin (DTMB) subsonic and transonic wind tunnel facilities during the period 4 April to 29 May, 1962. Tabulated data are located in Volume II for the low speed tests (Mach 0 to 0.2), and in Volume III for the high speed tests (Mach 0.4 to 0.85). Summary tables, graphs, model description, instrumentation, conditions tested, validity of data and other information are presented in Volume I. In general, good repeatability of data was obtained, and with the exception of Run 1 data of the high speed tests and a few other isolated test points, the data presented are believed to offer a reliable basis for predicting aircraft performance.

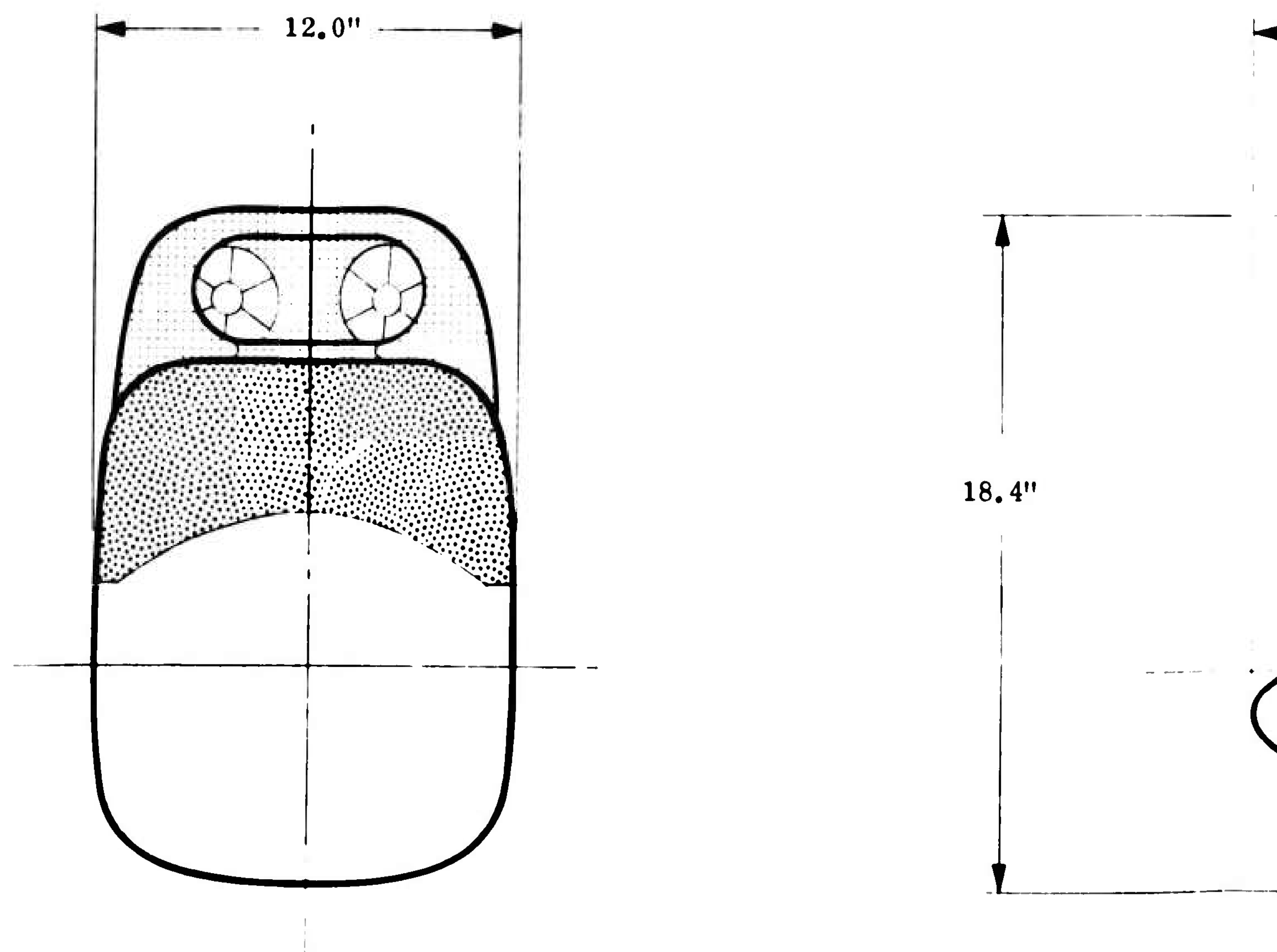
This is Volume I.

2.0 INTRODUCTION

This report published in three volumes presents low and high speed wind tunnel test results for a 1/5-scale inlet model of the U.S. Army XV-5A Lift Fan Flight Research Aircraft.

Tests were conducted at David W. Taylor Model Basin (DTMB) by Ryan Aeronautical Company as part of the XV-5A wind tunnel test program. Inlet performance data and surface pressure data were obtained over the anticipated flight speed range of the XV-5A aircraft for a variety of inlet and model configurations. Low speed tests (M=0 to .2) were conducted in the DTMB 8 x 10 foot subsonic wind tunnel facility during the period of 4 April to 2 May 1962. High speed tests (M=.4 to .85) were conducted in the DTMB 7 x 10 foot transonic wind tunnel facility during the period 24 May to 29 May 1962. Presentations in this report are limited to tabulated test data, and information considered necessary for their proper interpretation. Evaluation, analysis and discussions relating to data use for predicting XV-5A aircraft performance characteristics will be presented in subsequent aircraft technical reports. All reduced pressure data obtained from the wind tunnel tests are presented in tabular form. Low speed data are located in Volume II and high speed data are located in Volume III.

Inlet pressure recovery data and compressor face pressure distribution factors for the model configurations and operating conditions tested are summarized in Table 4-1. Low speed and high speed wind tunnel indices are presented in Tables 4-3 and 4-4 respectively, which also show those portions of run data which have been plotted. Table 4-1 data are plotted in Figures 4-1 through 4-36. Representative inlet pressure contours are presented in Figures 4-37 through 4-47. External pressure coefficients at Mach 0.8 tunnel speed are presented in Figures 4-48 through 4-81 for various model airflow rates, angles of attack, and sideslip angles. The model description is located in Section 3.0. General sketches and photographs are presented in Figures 2-1 to 2-8 of Section 2.0. Detailed model drawings are located in Figures 7-1 through 7-10. Photographs of the model installed in the low speed tunnel facility are shown in Figures 2-2 and 2-3; and photograph of the model installed in the high speed wind tunnel facility is shown in Figure 2-8.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18.4"

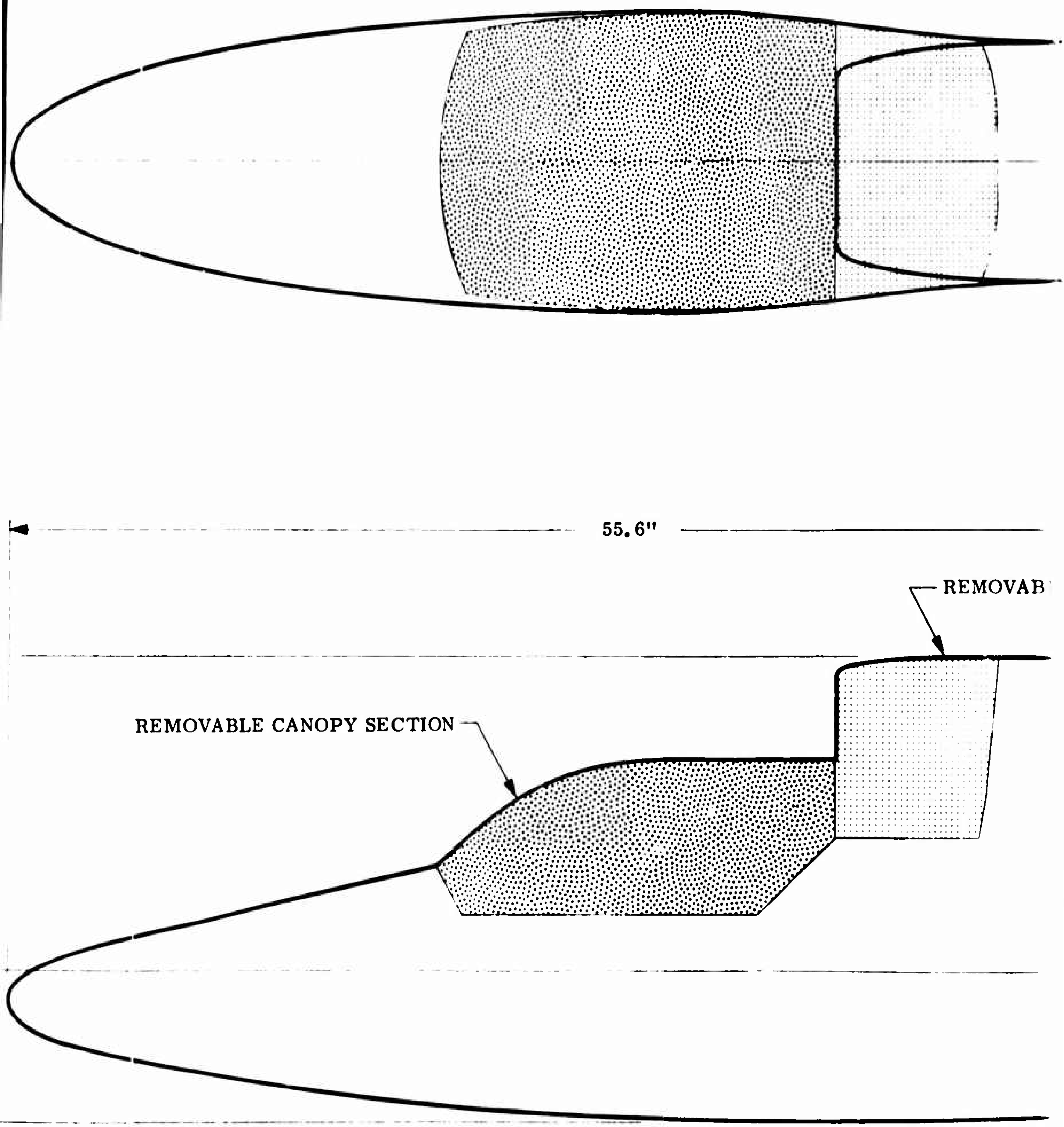


Figure 2-1 Sketch of XV-

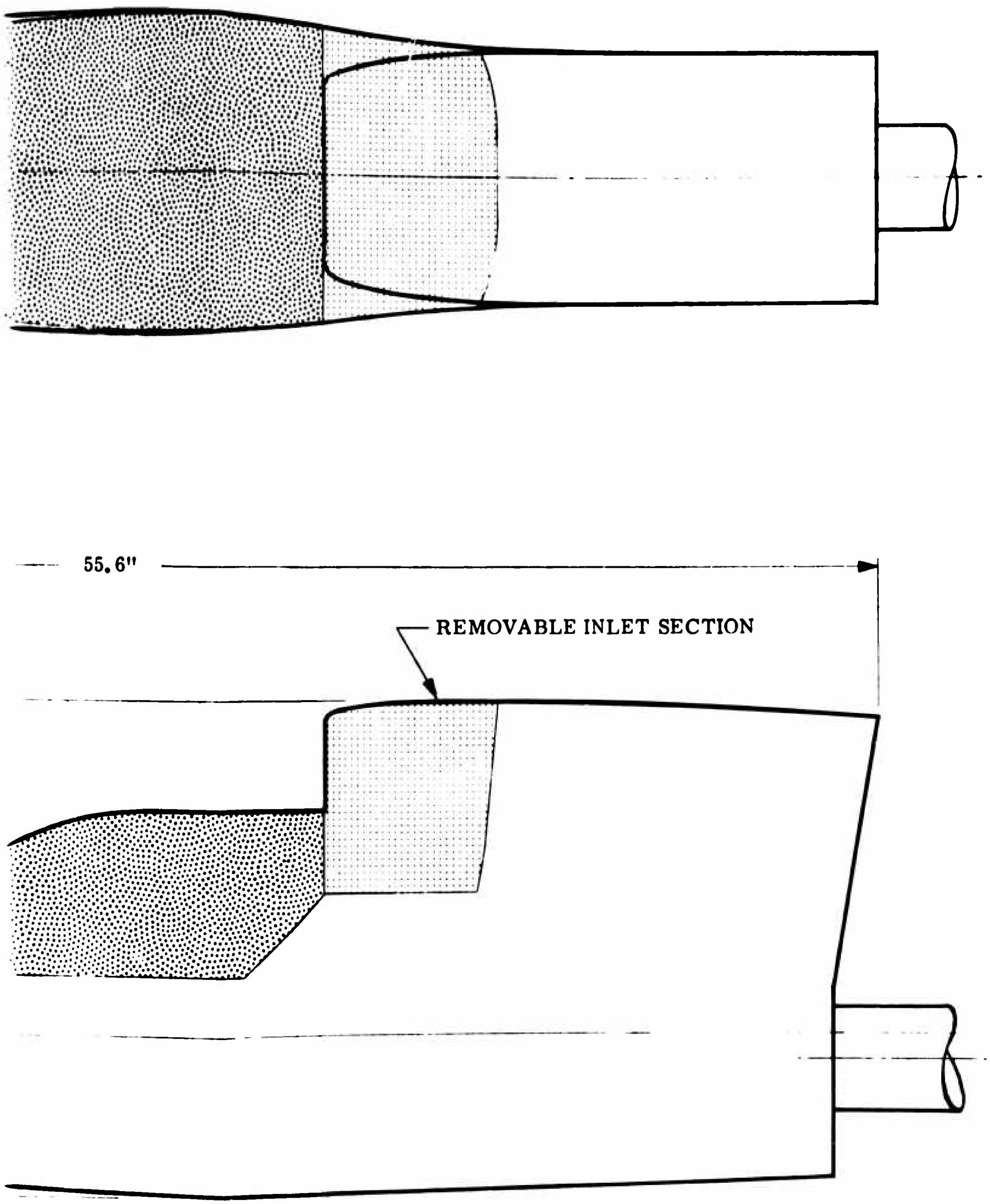


Figure 2-1 Sketch of XV-5A 1/5-Scale Inlet Model

Figure 2-2 Front View of XV-5A Inlet Model Mounted on Low Speed Wind Tunnel Sector Support System at Negative α and Positive β

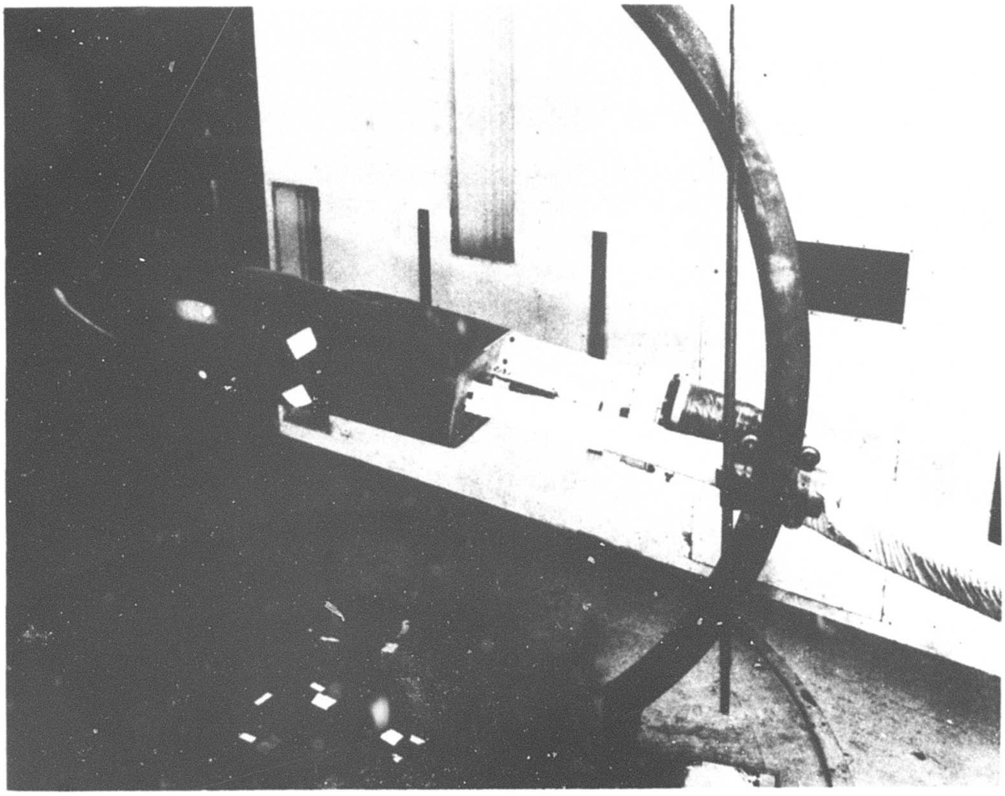


Figure 2-3 Three-Quarter Rear View of XV-5A Inlet Model Installed in Low Speed Wind Tunnel

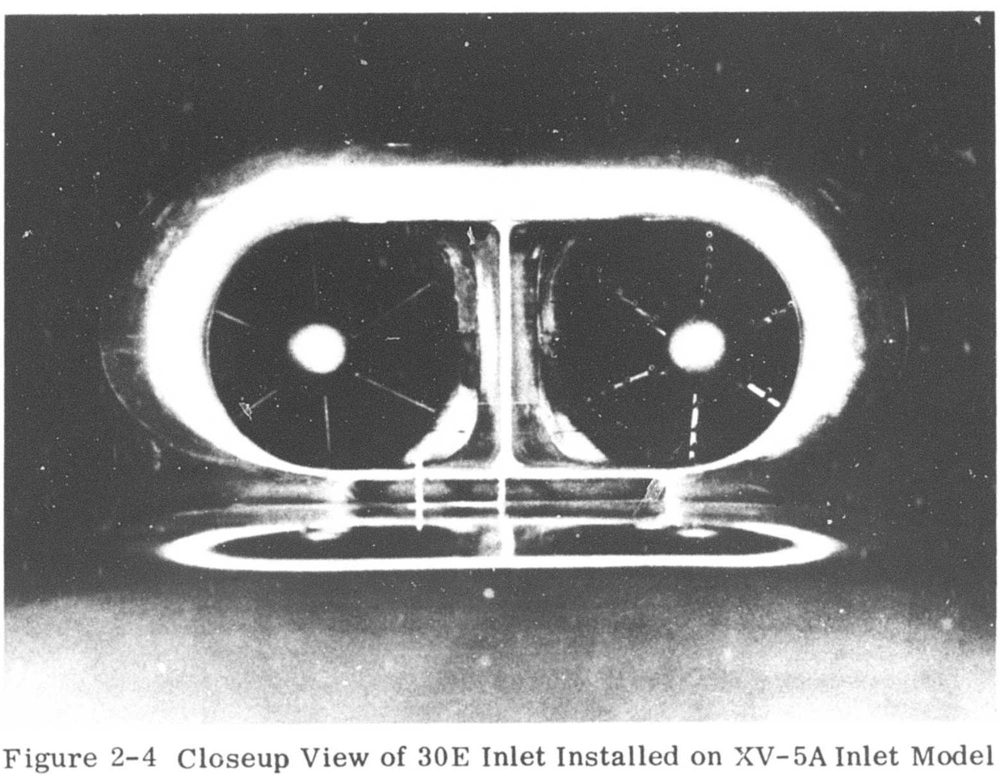


Figure 2-4 Closeup View of 30E Inlet Installed on XV-5A Inlet Model

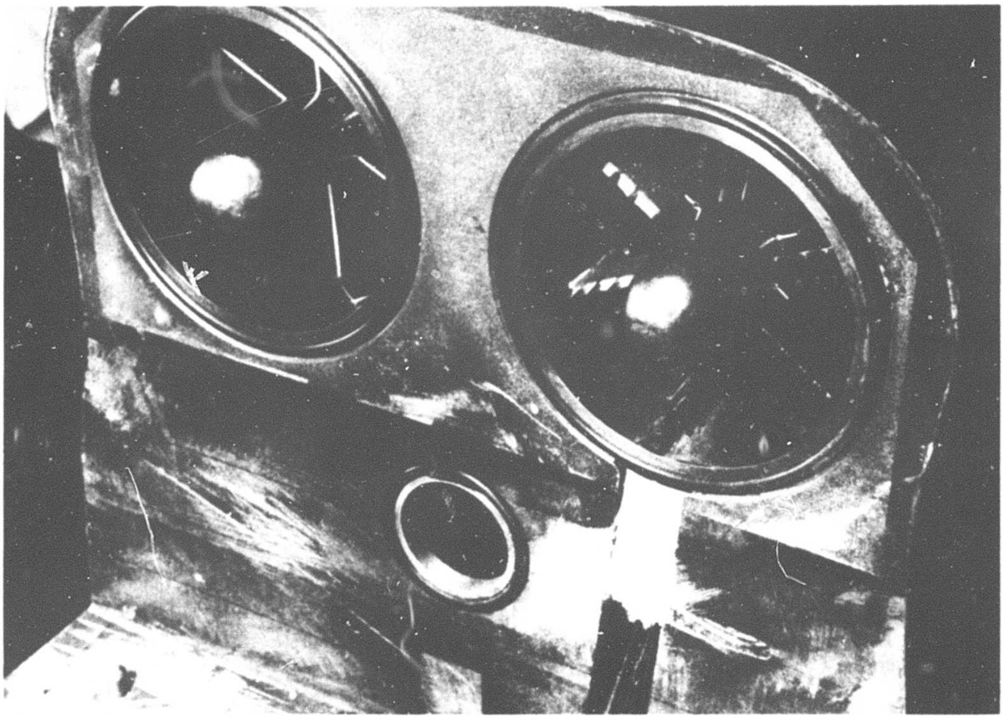


Figure 2-5 Engine Compressor Face Instrumentation
And Boundary Layer Duct

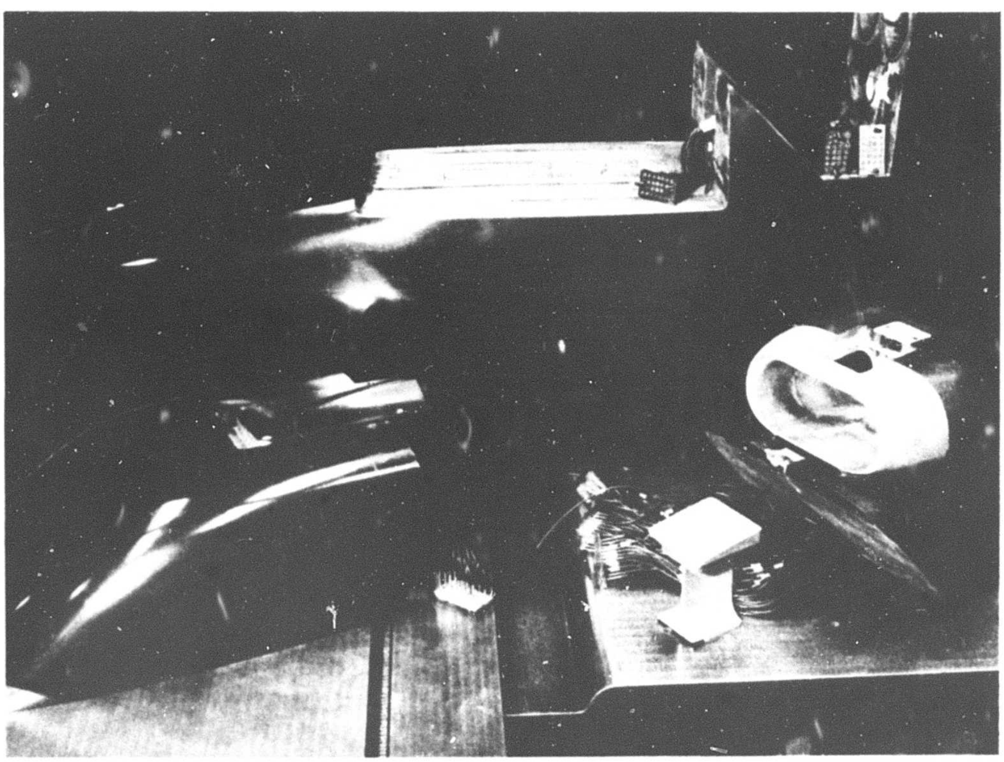


Figure 2-6 XV-5A Inlet Model Components

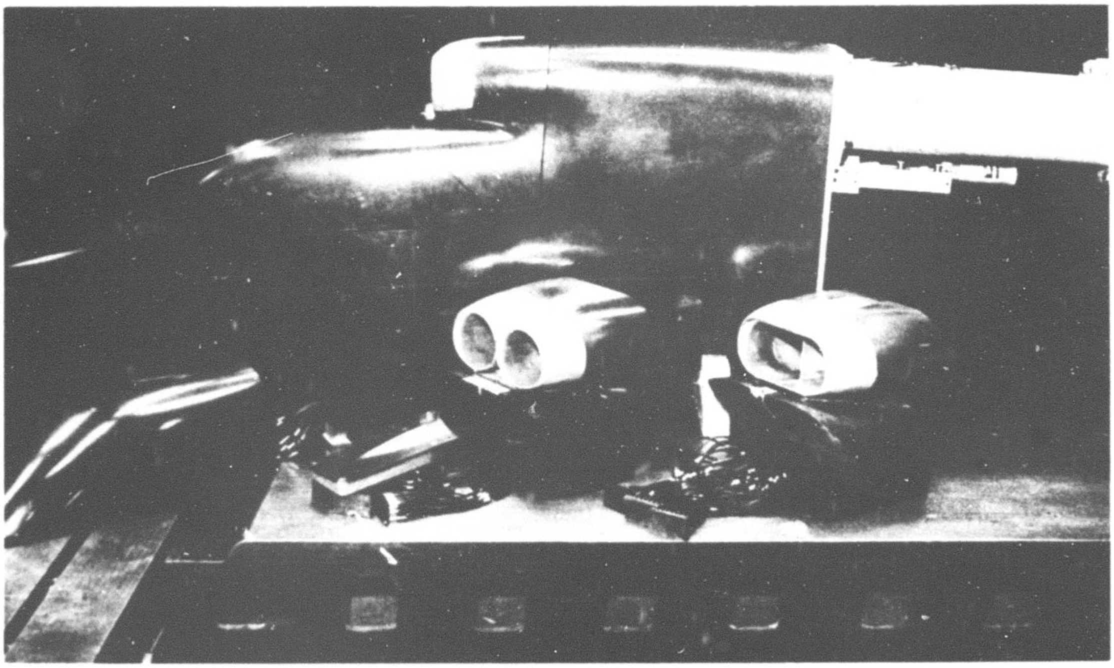


Figure 2-7 XV-5A Inlet Model Interchangeable Components Tested

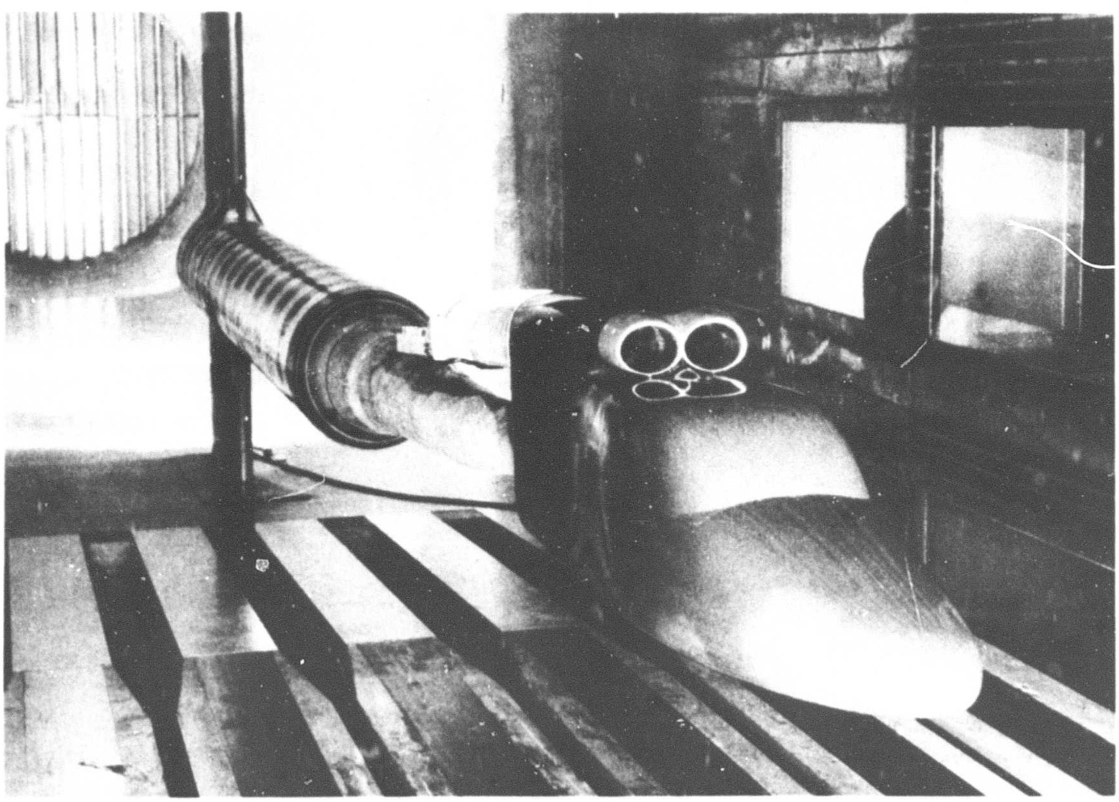


Figure 2-8 View of XV-5A Inlet Model Installed in High Speed Wind Tunnel

3.0 MODEL DESCRIPTION AND TEST PROCEDURES

3.1 MODEL AND INSTALLATION

The Ryan XV-5A 1/5-scale inlet model was designed for testing in both low speed and high speed wind tunnels of the David W. Taylor Model Basin facility. The model was constructed and instrumented by Contour Company, Rosemead, California according to specifications, drawings, and loft boards furnished by Ryan Aeronautical Company. Model configuration flexibility was obtained through a series of interchangeable instrumented components, including two canopy sections, three inlet sections and three inlet splitter sections which were attachable to the basic fuselage. Air flow passages were provided to simulate engine air flow and boundary layer bleed ducts. Compatible and interchangeable sting adaptors attached to the model base permitted model installation on the mounting systems of both low speed and high speed wind tunnel facilities without modification.

The model was constructed mostly of alternately oriented laminates of one-inch mahogany bonded with Penacolite to form a herringbone bond for added strength. The Penacolite bond is suitable for use to 120°F. The basic model component is the fuselage section, which provides space for instrumentation and attachment of model interchangeable components, and which is attached to the sting adaptors for wind tunnel installation. Model fabrication tolerances related to loft boards were: external lines, ± 0.030; inlet lips, ± 0.003; and inlet duct passages, ± 0.005 inches. Inlet lips were fabricated of aluminum. The model was finished with a highly polished paint. Component notation and model configurations tested are summarized in Table 3-1.

Model instrumentation consisted of 153 static pressure probes located and identified in Figure 3-1 and Table 3-2. Table 3-2 also refers to model drawings, and shows where information may be obtained about detailed instrument location and identification. A majority of the pressure probes were connected to three Scanivalves of 48 ports each. Simultaneous readings of all Scanivalve data were obtained by storing pressures in the storage manifolds by means of lockout valves.

Stored pressures were fed to the Scanivalves, and transmitted to the recording system by pressure transducers.

During high speed tests from $0.7 \leq M \leq 0.85$, it was discovered that a few pressures were less than estimated, and thus exceeded the pressure transducer capacity of the system involved. This condition was corrected and tests were continued. Data so affected are indicated by the term P.O. (meaning pressure overflow) in the tabular data. Data were recorded sequentially on punched tape, coded for the ALWAC III-E computer, and typed by a Frieden Flexowriter. Test condition and control information were manually typed into the data recording system. Model engine-air flow rates were controlled by remotely positioned conical plugs at the outlet of the model air flow passages. Since the plugs were separately controlled from fully closed to fully open positions, engine-out conditions could be simulated. Only the left engine duct was fully instrumented. Thus in applying the model data to the full-scale aircaft, identical flow in both ducts is expected at all angles of attack for zero sideslip angles while unequal flow is expected during sideslip angle studies so that both positive and negative values must be considered to determine inlet performance during sideslip conditions. Flow control instrumentation (Table 3-2) was provided in the calibrated model venturi section of both engine air ducts and photographically recorded from manometer boards. In the low speed tests, engine air flow was obtained by drawing air through two 4-inch hoses connected to an external suction system provided by the facility as shown in Figure 3-2. This system which used calibrated orifice plates also served to calibrate the venturi section of the model. In the high speed tests, engine air flow was obtained by wind tunnel ram pressure. The air was exhausted into the wind tunnel downstream of the model.

Additional information on the model design may be found in References 5-1 and 5-2. Reference 5-1 is reproduced and included in Appendix 7.1 of this report for convenience.

3.2 TEST PROCEDURE

Prior to model installation in the low speed wind tunnel, model instrumentation was thoroughly checked for defects resulting from shipping and/or handling. Except for the pressure probes noted in Table 3-3, all instrumentation was considered in workable order. Periodically throughout both low speed and high speed wind tunnel tests, pressure checks were made to determine the validity of the pressure probes. Any discrepancies were noted and indicated on the output data. Transducer calibrations were obtained by applying known pressure differentials and noting the number of counts on the recorder system.

In general, the test procedure followed in both low speed and high speed wind tunnels consisted of the following steps:

1. Installation of model configuration in wind tunnel.

2. Establishment of wind tunnel speed.

3. Adjustment of model air flow rate.

4. Setting of model attitude by varying pitch (α) and sideslip (β) angles.

The variables in each step were investigated until the desired matrix of test data for each configuration was obtained. In the low speed facility, tunnel speed was controlled by dynamic pressure and all pressure data were referenced to barometric data. In the high speed facility, tunnel speed was controlled by Mach number, and all pressure data were referenced to total pressure.

TABLE 3-1
XV-5A INLET MODEL
CONFIGURATION NOTATION AND CONFIGURATIONS TESTED

Configuration Notation

C 1	Basic Canopy
C 2	Cut Down Canopy
I 0	24E Oval Inlet
I 1	30E Oval Inlet
I 2	Dual Inlet
S 0	Short Splitter Plate
S 1	Long Splitter Plate
S 2	Dual Inlet Splitter Plate
B 0	Boundary Layer Duct Plug Closed
B 1	Boundary Layer Duct Plug Open
E 1	Single Engine Operation
E 2	Two Engine Operation

Configurations Tested	Low Speed Wind Tunnel	High Speed Wind Tunnel
C I S B E		
1 1 1 1 2	X	X
1 0 1 1 2	X	X
1 1 0 1 2	X	-
1 1 0 0 2	X	-
1 0 0 1 2	X	-
1 0 0 0 2	X	-
1 2 2 1 2	X	X
1 2 2 0 2	X	-
2 1 1 1 2	X	-
1 1 1 1 1	X	-
1 0 1 1 1	X	X
1 0 0 1 1	X	-
1 2 2 1 1	X	X

* X Indicates configuration tested
\- Indicates configuration not tested

TABLE 3-2
XV-5A INLET MODEL
GENERAL LOCATION OF INSTRUMENTATION

Pressure Tube	General Designation	Reference Figure
101 - 130	Compressor Face Rake Total Pressure	7-9
131 - 142	Boundary Layer Rake Total Pressures	7-8
143 - 144	Boundary Layer Duct Total Pressures	7-1
201 - 206	Compressor Face Wall Static Pressures	7-8
207 - 212	Compressor Bullet Wall Static Pressures	7-9
213 - 224	Inlet Top Static Pressures	7-8
225 - 236	Inlet Side Static Pressures	7-8
237 - 245	Inlet Splitter Static Pressures	7-[illegible]
301 - 309	Inlet Bottom Static Pressures	
310 - 320	Nacelle Top Static Pressures	7-8, 7-1
321 - 329	Nacelle Side Static Pressures	7-8
330A - 334A*	Canopy Side Static Pressures	7-1
335 - 342	Canopy Center-line Static Pressures	7-1
343 - 344	Canopy Side Static Pressures	7-1
401 - 404	Flow Meter Rake Total Pressures	7-6
405 - 408	Flow Meter Wall Static Pressures	7-6
409 - 412	Flow Meter Rake Total Pressure	7-6
413 - 416	Flow Meter Wall Static Pressures	7-6

* Tubes 330 - 334 were replaced by 330A and 334A. Only data from the latter were recorded.

TABLE 3-3
XV-5A INLET MODEL
IDENTIFICATION OF DEFECTIVE PRESSURE TUBES DURING TEST

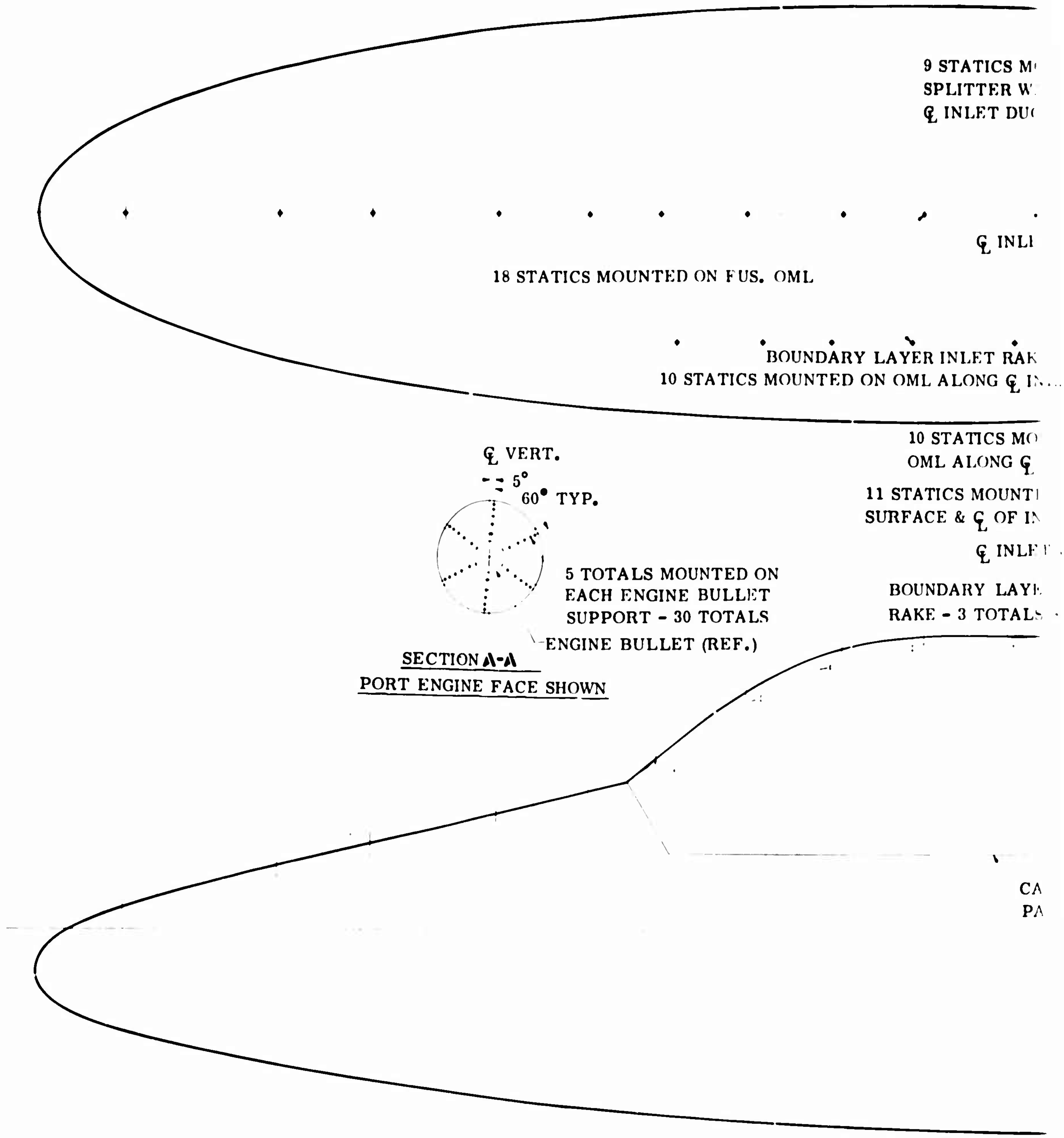
<u>Low Speed Tests</u>

All Runs

Component		
Fuselage		233, 334
Canopy C1		331
Inlet	I 0	214, 215, 234, 310, 325
	I 1	223, 226, 230, 321, 325, 326
	I 2	217, 237, 240, 310, 312, 315, 327, 328, 329

<u>High Speed Tests</u>

Runs 1 and 2	108, 120, 131, 136, 202, 212, 223, 238, 239, 301, 312, 313, 314, 318, 328, 332A
Configuration	C1, S1, B1
Runs 3, 4 and 5	108, 120, 126, 131, 134, 136, 204, 206, 212, 215, 234, 238, 239, 301, 310, 312, 313, 314, 317, 318, 321, 328, 330A, 332A, 333A
Configuration	C1, I0, S1 and C1, I2, S2


9 STATICS M
SPLITTER W
℄ INLET DU
℄ INL
18 STATICS MOUNTED ON FUS. OML
BOUNDARY LAYER INLET RAK
10 STATICS MOUNTED ON OML ALONG ℄ I
10 STATICS MO
OML ALONG ℄
℄ VERT.
5°
60° TYP.
11 STATICS MOUNT
SURFACE & ℄ OF I
℄ INLE
5 TOTALS MOUNTED ON
EACH ENGINE BULLET
SUPPORT - 30 TOTALS
BOUNDARY LAY
RAKE - 3 TOTAL
ENGINE BULLET (REF.)
SECTION A-A
PORT ENGINE FACE SHOWN
CA
PA

A

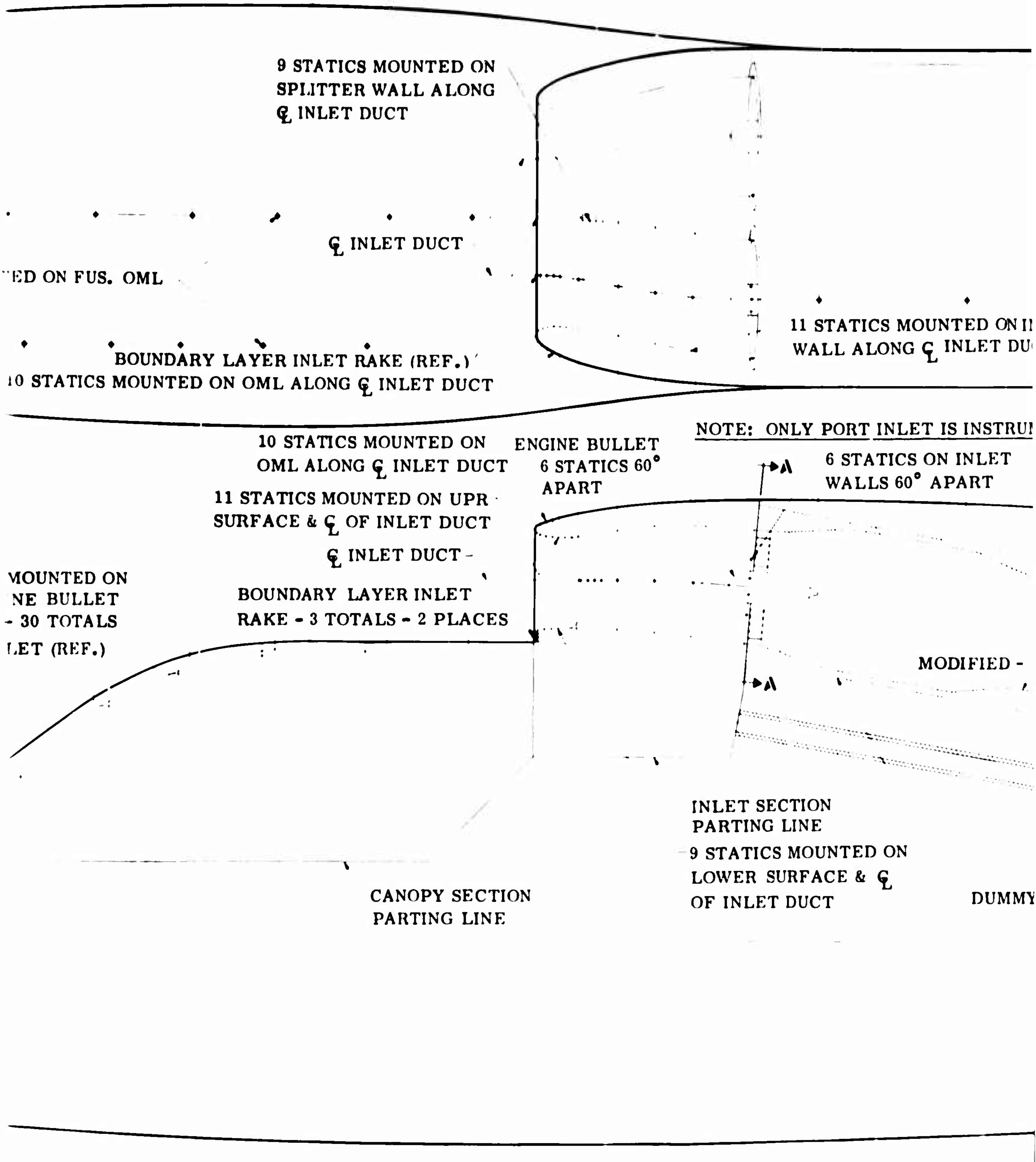


Figure 3-1 General

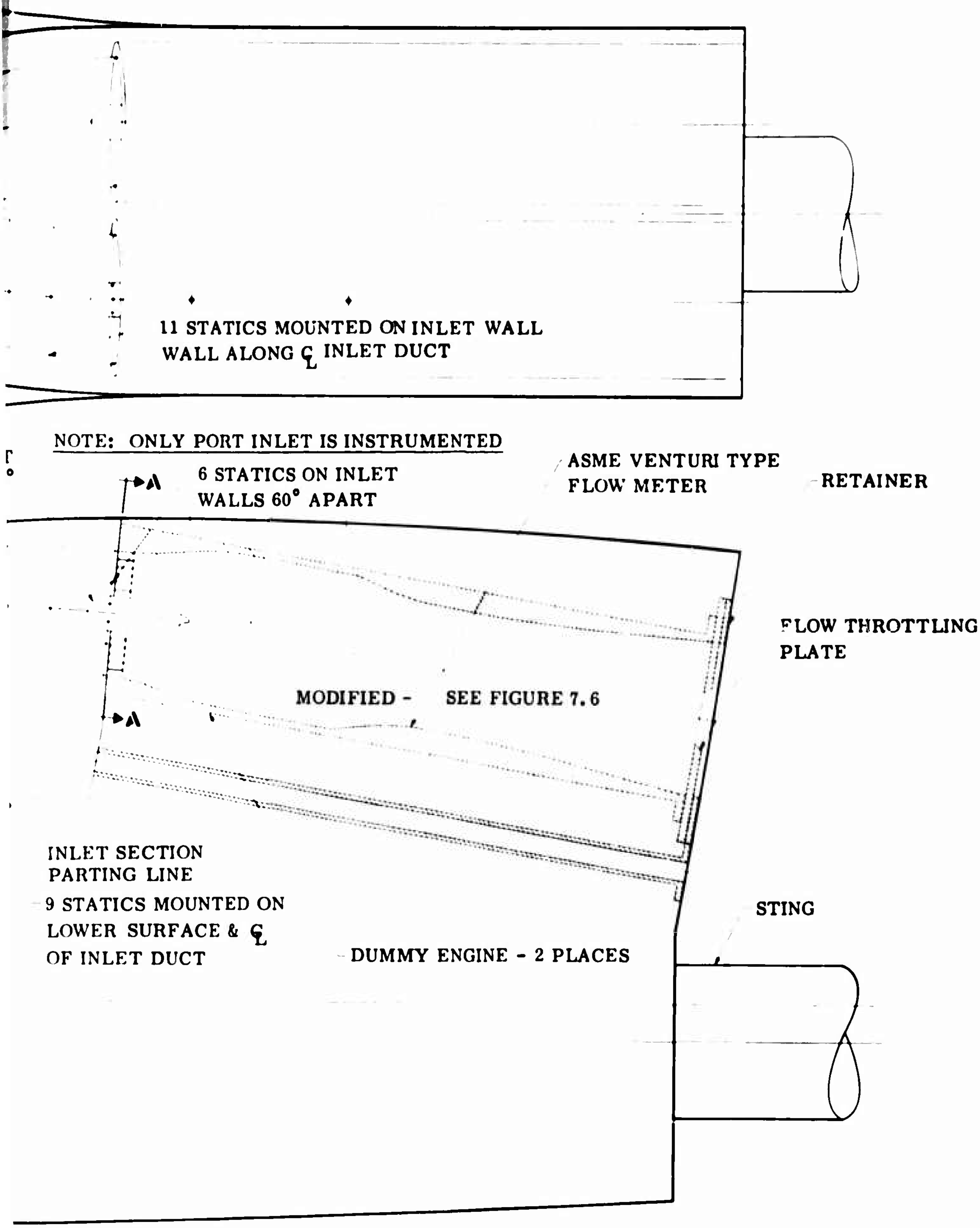


Figure 3-1 General Instrumentation and Air Flow Passages

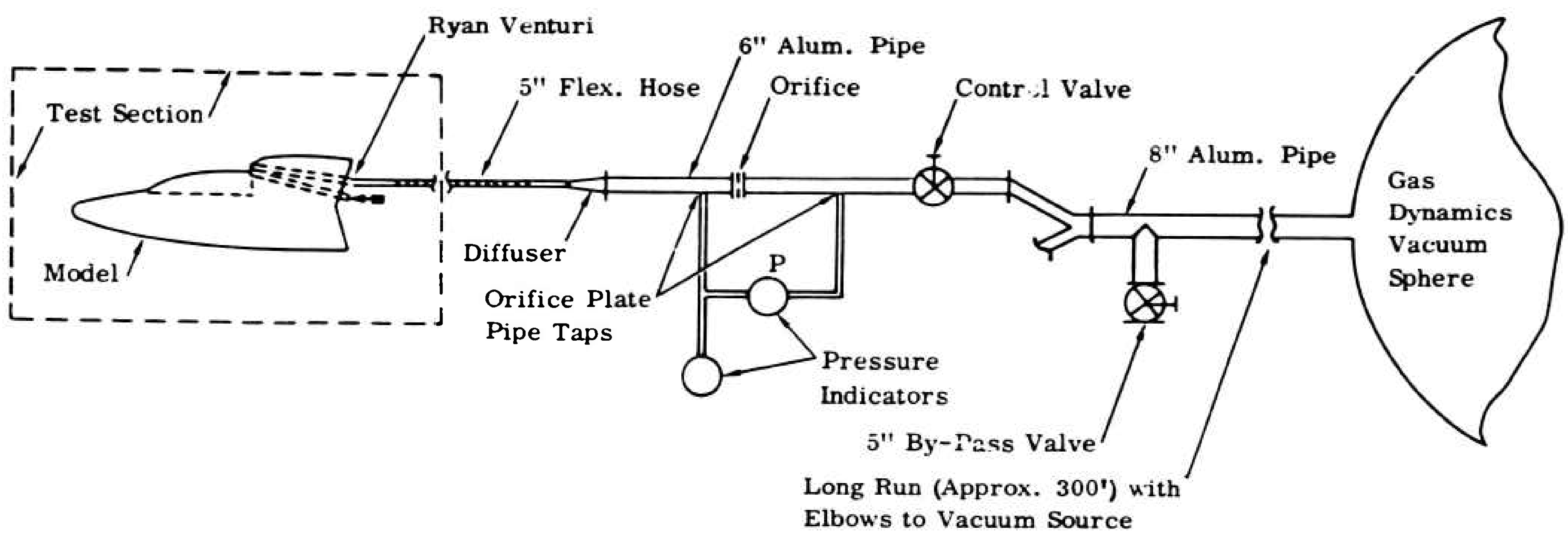


Figure 3-2 Engine Air Simulation Control System

4.0 TEST RESULTS

4.1 GENERAL

Test results are presented in this report for both low speed and high speed wind tunnel tests. A total of 13 simulated aircraft configurations consisting of 7 structural configurations and 4 aircraft operational configurations were investigated, (Table 3-1). The aircraft operational configurations included single and dual engine operation with the boundary layer bleed duct operative and inoperative. The total ranges of simulated aircraft operating conditions investigated during the inlet model test program are as follows:

a. Engine speed: idle (47%) $\leq$ %RPM $\leq$ 100%

b. Flight speed: $0 \leq M \leq 0.85$

c. Angle of attack: $-20° \leq \alpha \leq 20°$

d. Angle of sideslip: $-30° \leq \beta \leq 30°$

Not all configurations were investigated with the same degree of thoroughness, since the test program planned for a preliminary screening of configurations during the low speed tests ($0 \leq M \leq 0.2$) followed by a more intensive investigation of selected configurations during the high speed tests. A complete list of configurations and associated operating conditions tested are presented in Table 4-1.

4.2 INLET PERFORMANCE

Inlet performance is presented in Table 4-1 which summarizes inlet pressure recovery (NR). Also in Table 4-1, both the maximum variation of total pressure (K) and wall static pressure (L) at the compressor face are expressed in percent of the average compressor face total pressure, (see Section 6.0 for definition of symbols).

For convenience, and to avoid confusion due to duplicate test point identification, the prefix letters H and L are used to identify high speed and low speed wind tunnel test points respectively.

A complete tabulation of all pressure data obtained during the low speed wind tunnel test is located in Volume II of this report, published under separate cover. A complete tabulation of all pressure data obtained during the high speed wind tunnel test is located in Volume III of this report, also published under separate cover. The reported mass flow ratios (m/m*) for the low speed tests were based on a compressor face to inlet throat area ratio of 1.0177. A review of inlet model loft boards shows this ratio should have been 1.0288. Therefore, although of small effect, the quoted values of m/m* in Volume II should be increased by the factor 1.0109 to make them consistent with values reported in the high speed data of Volume III. The m/m* data of Table 4-1 have been corrected for this effect and are therefore consistent. Repeatability of data obtained is excellent as shown by the data of Table 4-2. The data of Table 4-1 are presented in Figures 4-1 through 4-36.

From brief Schlieren surveys, the critical Mach number (M_{CR}) for the 30E inlet with the basic canopy (C 1) was observed to be approximately 0.728; with the cut down canopy (C2), $M_{CR} = 0.797$ was observed; and for the 30E inlet cowl, $0.85 \leq M_{CR} \leq 0.87$.

Data reduction procedures were essentially identical for both low speed and high speed wind tunnel data; therefore the procedure of Reference 2 provides an adequate presentation except for the following comments:

(1) the equation for K of section n, page 9 of Reference 2 should read

$$K = gM_c \, (\gamma / R)^{1/2} \Big/ \left(1 + \frac{\gamma - 1}{2} M_c^{\,2}\right)^{\frac{\gamma+1}{2(\gamma-1)}}$$

(2) In reducing the high speed wind tunnel data, the inlet mass flow ratio (m/m*) was based on compressor face Mach number (M_c) determined from the equation

$$M_c = \left\{ \frac{2}{\gamma - 1} \left[\left(\frac{P_{tc}}{P_{cw}}\right)^{\frac{(\gamma-1)}{\gamma}} - 1 \right] \right\}^{1/2}$$

where P_{tc} and P_{cw} are the average total and static pressures respectively at the compressor face.

Knowing the compressor face Mach number, the mass flow ratio m/m* was calculated from the equation

$$m/m^* = \frac{1.728 \, M_c}{\left(1 + .2 \, M_c^{\,2}\right)^3} \left(\frac{A_c}{A_t}\right)_{model} \left(\frac{P_{tc}}{P_{to}}\right)$$

where $A_c = 7.50\ in^2$, $A_t = 7.29\ in^2$ (model compressor face and inlet throat areas respectively), P_{tc} is as above, and P_{to} is the free steam total pressure.

(3) Low speed tunnel pressure data were referenced to barometric pressure (essentially test section static pressure); and high speed tunnel pressure data were referenced to free stream total pressure.

4.3 SURFACE PRESSURE DATA

Simultaneously with the gathering of inlet performance data, surface pressure data were gathered from approximately 80 static pressure orifices, (see Pressure Tubes 213 - 344 of Table 3-2). These data are tabulated in Volumes I and II of this report in reduced form as conventional pressure coefficients referenced to free stream static and dynamic pressures.

External pressure coefficients are presented in Figures 4-48 through 4-81 for a tunnel speed of Mach = 0.8 (Cases H3-83 through H3-92 and H4-1 through H4-12 of Table 4-1b) for the basic canopy (C1), the 24E oval inlet (I0) and the long splitter (S1). Effects of model airflow rate, angle of attack, sideslip angle and fuselage station are shown. The 24E oval inlet data were used since the 30E oval inlet data Run H1 were limited in scope and were of questionable validity. Also, little difference is expected with either inlet.

Figures 4-48 through 4-53 show windshield and canopy pressures as a function of weight flow (W_c) for various angle of attack conditions. Figures 4-54 through 4-56 are essentially cross plots of the previous six figures for a W_c value of 2.0 lbs/sec., and show the variation of windshield and canopy pressure with full-scale fuselage station. Figures 4-57 through 4-81 present similar type of information for the windshield and canopy at angles of sideslip and for the external inlet lip for angles of attack and angles of sideslip.

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RYAN

Table 4-1a
Ryan XV-5A 1/5 Scale Inlet Model
Performance Summary
Configuration C1I1S1B1E2

	M_o	α	β	m/m^*	NR	K	L	CASE
	0	0	0	.524	.990	4.50	1.84	L22-3
				.676	.983	8.13	3.31	L22-4
				.75	.979	9.71	3.94	L22-1
				.746	.979	10.71	4.17	L22-5
				.804	.975	12.41	4.79	L22-2
	.02	0	-30	.466	.974	11.36	3.46	L39-1
			+30	.751	.991	4.35	2.72	L39-2
			+30	.828	.988	5.64	3.57	L40-1
			-30	.794	.970	13.30	3.92	L40-2
	.10	0	0	.520	.996	2.36	1.28	L31-1
		-20	0	.521	.996	2.02	1.29	L31-2
		+20	0	.521	.993	3.10	1.36	L31-3
		0	-10	.520	.993	3.73	1.35	L31-4
		0	10	.520	.997	2.70	1.30	L31-5
		-10	0	.521	.996	2.25	1.28	L31-6
		10	0	.521	.995	2.41	1.27	L31-7
		0	0	.674	.991	3.73	2.37	L32-1
		-4	0	.675	.992	3.47	2.23	L32-2
		-10	0	.673	.992	3.35	2.23	L32-3
		-20	0	.672	.993	3.29	2.18	L32-4
		+4	0	.673	.991	3.98	2.24	L32-5
		10	0	.672	.990	4.39	2.27	L32-6
		20	0	[illegible]	[illegible]	5.65	2.36	L32-7
		0	-4	.674	[illegible]	5.03	2.24	L32-8
		0	-10	.672	.988	6.81	2.32	L32-9
		0	+4	.673	[illegible]	3.98	2.23	L32-10
		0	10	.674	[illegible]	4.76	2.32	L32-11
		4	10	.675	[illegible]	4.85	2.33	L32-12
		4	4	.676	.992	3.98	2.22	L32-13
		4	-4	.676	[illegible]	5.15	2.24	L32-14
		4	-10	.672	[illegible]	6.74	2.31	L32-15
		-4	-10	.673	[illegible]	6.67	2.28	L32-16
		-4	-4	.676	.991	4.68	2.23	L32-17
		-4	+4	.673	.993	3.91	2.26	L32-18
		-4	10	.674	.994	4.68	2.34	L32-19
		0	0	.747	.989	4.77	2.72	L33-1
		-4	0	.748	.990	4.32	2.65	L33-2
		-10	0	.752	.991	3.96	2.62	[illegible]

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RYAN

Table 4-1a (Continued)

	M_o	α	β	$m/_{m*}$	NR	K	L	CASE
	.10	-20	0	.748	.992	3.69	2.60	L33-4
		4	0	.752	.989	4.89	2.70	L33-5
		10	0	.747	.988	5.39	2.71	L33-6
		20	0	.75	.986	6.60	2.81	L33-7
		0	-4	.75	.988	6.08	2.62	L33-8
		0	-10	.748	.985	8.25	2.79	L33-9
		0	4	.752	.990	4.30	2.68	L33-10
		0	10	.75	.992	5.27	2.68	L33-11
		4	10	.748	.992	5.46	2.74	L33-12
		4	-10	.747	.984	8.19	2.78	L33-13
		-4	-10	.748	.985	8.15	2.74	L33-14
		-4	+10	.75	.992	5.13	2.67	L33-15
		0	0	.822	.986	7.08	3.41	L34-1
		-4	0	.827	.987	6.85	3.39	L34-2
		-10	0	.822	.988	6.28	3.36	L34-3
		-20	0	.826	.990	5.74	3.31	L34-4
		4	0	.822	.985	7.45	3.45	L34-5
		10	0	.820	.984	7.86	3.49	L34-6
		20	0	.820	.981	8.95	3.65	L34-7
		0	-10	.811	.980	10.76	3.54	L34-8
		0	10	.833	.988	6.35	3.53	L34-9
	.15	0	0	.667	.993	4.35	2.71	L25-1
		-4	0	.669	.994	4.17	2.72	L25-2
		-10	0	.668	.994	3.89	2.76	L25-3
		-20	0	.670	.995	3.43	2.74	L25-4
		4	0	.665	.993	4.53	2.70	L25-5
		10	0	.666	.992	4.51	2.69	L25-6
		20	0	.669	.990	4.76	2.76	L25-7
		0	-4	.667	.992	3.60	2.70	L25-8
		0	-10	.667	.988	6.27	2.93	L25-9
		0	4	.670	.994	4.38	2.75	L25-10
		0	10	.667	.995	4.50	2.69	L25-11
		4	10	.670	.995	4.77	2.69	L25-12
		4	4	.669	.994	4.58	2.73	L25-13
		4	-4	.669	.992	3.70	2.70	L25-14
		4	-10	.668	.986	6.50	2.93	L25-15
		-4	-10	.668	.989	5.76	2.82	L25-16
		-4	-4	.669	.993	3.66	2.64	L25-17
		-4	+4	.671	.994	4.18	2.73	L25-18

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Table 4-1a (Continued)

	M_o	α	β	m/m^*	NR	K	L	CASE
	.15	-4	10	.67	.996	4.06	2.08	L25-19
		0	0	.743	.992	4.81	3.03	L23-2
		-4	0	.737	.992	4.64	3.00	L23-3
		-10	0	.739	.993	4.44	2.99	L23-4
		-20	0	.741	.994	4.15	3.01	L23-5
		4	0	.738	.991	4.85	3.02	L23-6
		10	0	.740	.991	4.83	3.03	L23-7
		20	0	.738	.988	5.19	3.12	L23-8
		0	-4	.738	.990	3.98	2.99	L23-9
		0	-10	.742	.986	7.21	3.23	L23-10
		0	4	.736	.993	5.05	3.10	L23-11
		0	10	.743	.994	5.07	3.00	L23-12
		4	10	.740	.993	5.91	3.47	L23-13
		4	4	.738	.991	5.99	3.52	L23-14
		4	-4	.743	.988	5.34	3.55	L23-15
		4	-10	.738	.981	8.62	3.80	L23-16
		-4	-10	.737	.984	8.09	3.76	L23-17
		-4	-4	.744	.990	4.46	3.50	L23-18
		-4	+4	.743	.992	5.60	3.55	L23-19
		-4	10	.740	.993	5.60	3.45	L23-20
		0	0	.742	.991	5.20	3.44	L23-21
		0	0	.822	.988	5.78	4.19	L24-2
		-4	0	.824	.988	5.78	4.19	L24-3
		-10	0	.828	.989	5.67	4.13	L24-4
		-20	0	.829	.990	5.62	4.11	L24-5
		4	0	.828	.987	5.89	4.15	L24-6
		10	0	.827	.986	6.32	4.26	L24-7
		20	0	.824	.981	8.12	4.56	L24-8
		0	-4	.824	.986	7.17	4.22	L24-9
		0	-10	.809	.977	10.85	4.52	L24-10
		0	4	.827	.989	6.75	4.20	L24-11
		0	10	.829	.991	7.08	4.31	L24-12
	.20	0	0	.512	.999	2.11	1.26	L27-1
		-4	0	.511	.999	1.66	1.25	L27-2
		-10	0	.511	.999	1.37	1.24	L27-3
		-20	0	.512	.999	1.69	1.27	L27-4
		4	0	.513	.998	2.73	1.29	L27-5
		10	0	.513	.997	2.96	1.28	L27-6
		20	0	.509	.997	2.49	1.30	L27-7

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Table 4-1a (Continued)

	M_o	α	β	$^m/_{m*}$	NR	K	L	CASE
	.2	0	-4	.509	.998	2.26	1.30	L27-8
		0	-10	.507	.996	2.78	1.29	L27-9
		0	4	.515	.999	1.43	1.17	L27-11
		0	10	.513	1.000	1.23	1.16	L27-12
		4	10	.513	.999	1.43	1.16	L27-13
		4	4	.513	.999	1.93	1.22	L27-14
		4	-4	.509	.998	2.26	1.28	L27-15
		4	-10	.512	.994	3.22	1.33	L27-16
		-4	-10	.513	.996	2.34	1.22	L27-17
		-4	-4	.513	.998	2.02	1.25	L27-18
		-4	4	.513	.999	1.35	1.19	L27-19
		-4	10	.508	.999	1.16	1.18	L27-20
		0	0	.663	.996	3.59	2.23	L28-1
		-4	0	.663	.996	3.94	2.19	L28-3
		-10	0	.660	.997	3.52	2.17	L28-4
		-20	0	.661	.998	2.73	2.14	L28-6
		4	0	.660	.995	3.46	2.19	L28-7
		10	0	.658	.995	3.68	2.17	L28-8
		20	0	.660	.994	4.47	2.14	L28-9
		0	-4	.662	.995	3.15	2.05	L28-10
		0	-10	.659	.990	5.67	2.32	L28-11
		0	4	.658	.997	4.17	2.18	L28-12
		0	10	.658	.998	3.11	2.15	L28-13
		4	10	.662	.998	4.13	2.15	L28-14
		4	4	.659	.996	4.05	2.18	L28-15
		4	-4	.658	.995	3.29	2.08	L28-16
		4	-10	.658	.988	6.21	2.39	L28-17
		-4	-10	.658	.991	5.32	2.23	L28-18
		-4	-4	.661	.995	3.42	2.16	L28-19
		-4	4	.660	.997	3.89	2.19	L28-20
		-4	10	.664	.999	2.70	2.14	L28-22
		0	0	.727	.995	3.96	2.62	L29-1
		-4	0	.728	.995	4.02	2.64	L29-2
		-10	0	.728	.995	4.52	2.62	L29-3
		-20	0	.728	.997	3.37	2.60	L29-4
		4	0	.732	.995	4.35	2.66	L29-5
		10	0	.733	.994	4.64	2.64	L29-6
		20	0	.727	.992	5.47	2.61	L29-7
		0	-4	.733	.994	3.95	2.53	L29-8
		0	-10	.733	.987	6.94	2.88	L29-9

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Table 4-1a (Continued)

	M_o	α	β	m/m^*	NR	K	L	CASE
	.2	0	4	.733	.996	4.73	2.66	L29-10
		0	10	.733	.997	4.55	2.58	L29-11
		4	10	.721	.997	5.16	2.59	L29-12
		4	4	.732	.995	4.53	2.65	L29-13
		4	-4	.732	.993	4.09	2.56	L29-14
		4	-10	.733	.985	7.43	2.87	L29-15
		-4	-10	.735	.989	6.42	2.65	L29-16
		-4	-4	.741	.994	3.86	2.46	L29-17
		-4	4	.735	.996	4.77	2.57	L29-18
		-4	10	.729	.997	3.65	2.54	L29-19
		0	0	.822	.991	6.05	3.32	L30-2
		-4	0	.824	.992	5.87	3.40	L30-3
		-10	0	.817	.992	5.46	3.48	L30-4
		-20	0	.822	.994	4.92	3.43	L30-5
		4	0	.817	.990	6.38	3.32	L30-6
		10	0	.824	.990	6.53	3.29	L30-7
		20	0	.810	.987	8.00	3.40	L30-8
		0	-4	.822	.990	5.60	3.26	L30-9
		0	-10	.813	.978	10.22	3.69	L30-10
		0	4	.824	.992	6.65	3.58	L30-11
		0	10	.825	.995	6.22	3.48	L30-12
		4	10	.825	.993	6.94	3.49	L30-13
		4	4	.818	.991	6.66	3.50	L30-14
		4	-4	.814	.988	5.75	3.30	L30-15
		4	-10	.806	.975	11.27	3.84	L30-16
		-4	-10	.809	.980	9.97	3.67	L30-17
		-4	-4	.823	.990	5.78	3.55	L30-18
		-4	+4	.821	.992	6.30	3.50	L30-19
		-4	10	.825	.995	6.00	3.43	L30-20
	.7	-4	0	.350	1.000	.30	.57	H1-8
		-4	0	.782	.999	2.25	3.27	H1-10
		4	0	.880	.997	5.66	4.69	H1-14
		4	0	.325	.953	1.32	.49	H1-17
		-4	0	.894	.997	3.97	4.93	H1-11
		0	-4	.881	.995	4.23	4.79	H1-21
		4	0	.924	.996	6.57	5.64	H1-13
		4	0	.767	.998	3.88	3.18	H1-15
		-4	0	.925	.997	4.80	5.61	H1-12
		0	4	.880	.997	3.56	4.86	H1-24

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Table 4-1a (Continued)

M_o	α	β	$^m/_{m*}$	NR	K	L	CASE
.7	4	0	.583	1.000	1.58	1.69	H1-16
	0	4	.923	.996	4.74	5.79	H1-23
	0	-4	.923	.993	6.09	5.58	H1-22
	0	0	.926	.996	5.41	5.61	H1-2
	0	0	.891	.997	4.69	4.87	H1-3
	0	0	.339	.978	.95	.75	H1-7
	-4	0	.597	1.000	1.00	1.71	H1-9
	0	-4	.588	1.000	1.14	1.67	H1-19
	0	0	.936	1.008	4.95	5.71	H2-1
	0	0	.780	.999	2.76	3.33	H1-4
	0	-4	.345	1.000	.42	.56	H1-18
	0	-4	.774	.998	2.73	3.31	H1-20
	0	0	.593	1.001	1.00	1.71	H1-5
.8	0	0	.816	.985	7.62	4.06	H1-27
	0	0	.373	.937	1.44	.61	H1-29
	0	0	.912	.982	9.32	5.80	H1-26
	0	0	.914	.982	9.35	5.78	H1-25
	0	0	.624	.984	5.69	2.16	H1-28

RYAN

Table 4-1b
Ryan XV-5A 1/5 Scale Inlet Model
Performance Summary
Configuration C11O5IB1E2

	M_o	α	β	m/m^*	NR	K	L	CASE
	0	0	0	.807	.967	14.99	[illegible]	L19-1
		0	0	.750	.971	12.67	3.57	L19-2
		0	0	.752	.972	12.36	3.68	L19-3
		0	0	.794	.963	15.37	4.28	L19-4
	.15	0	0	.740	.990	4.93	2.68	L20-1
		-4	0	.741	.990	4.81	2.68	L20-2
		4	0	.740	.989	5.14	2.75	L20-3
		0	-4	.741	.987	5.83	2.92	L20-4
		0	-10	.740	.980	9.34	3.10	L20-5
		0	4	.740	.991	5.22	2.67	L20-6
		0	10	.742	.999	5.40	2.73	L20-7
		-10	0	.740	.991	4.50	2.60	L20-9
		-20	0	.740	.992	5.43	2.57	L20-10
		10	0	.739	.988	[illegible]	2.75	L20-11
		20	0	.738	.984	6.09	2.94	L20-12
		0	0	.825	.985	6.48	3.63	L21-1
		-4	0	.825	.985	6.67	3.57	L21-2
		4	0	.822	.984	6.73	3.66	L21-3
		0	-4	.812	.981	8.60	3.74	L21-4
		0	-10	.800	.973	12.24	3.74	L21-5
		0	4	.820	.987	6.29	3.48	L21-8
		0	10	.828	.989	7.18	3.56	L21-7
		0	0	.820	.985	6.53	3.61	L21-9
		-10	0	.830	.987	6.84	3.48	L21-10
		-20	0	.830	.988	7.69	3.42	L21-11
		10	0	.825	.983	7.42	3.74	L21-12
		20	0	.818	.978	9.34	3.90	L21-13
	.4	10	0	.475	.998	2.15	.85	H4-70
		10	0	.536	.997	3.04	1.17	H4-71
		10	0	.610	.996	3.76	1.43	H4-72
		0	-4	.628	.997	3.55	1.55	H4-74
		-4	0	.501	1.000	1.09	.95	H4-64
		4	0	.573	.998	3.14	1.31	H4-68
		0	-4	.573	.998	2.70	1.27	H4-75
		0	-4	.495	.999	1.37	.95	H4-76
		4	0	.630	.998	3.99	1.59	H4-67
		-4	0	.586	.999	1.82	1.34	H4-65
		4	0	.491	.999	1.92	.94	H4-69

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Table 4-1b (Continued)

	M_o	α	β	m/m^*	NR	K	L	CASE
	.4	0	4	.492	1.000	1.17	.81	H4-77
		0	4	.631	.999	2.42	1.63	H4-79
		-4	0	.645	.998	3.01	1.68	H4-66
		0	-1	.639	.998	3.47	1.67	H4-61
		0	4	.574	.999	1.79	1.30	H4-78
		0	0	.500	1.000	1.37	.97	H4-63
		0	0	.583	.999	2.18	1.35	H4-62
	.6	5	0	.852	.992	8.28	3.09	H3-72
		2	4	.872	.997	5.61	3.46	H3-60
		2	4	.811	.998	4.38	2.86	H3-61
		2	8	.870	.998	5.50	3.51	H3-62
		2	-4	.700	.997	3.61	1.96	H3-54
		10	0	.852	.991	8.40	3.12	H3-74
		10	0	.682	.996	4.67	1.85	H3-75
		10	0	.287	.940	2.60	.42	H3-77
		2	4	.312	1.001	.30	.41	H3-57
		2	-4	.811	.994	6.30	2.74	H3-53
		0	0	.312	1.001	.34	.40	H3-37
		2	8	.529	1.000	.45	1.18	H3-65
		2	-8	.311	1.000	.77	.33	H3-67
		2	-4	.868	.991	7.93	3.15	H3-52
		9	0	.791	.993	6.65	2.57	H3-73
		2	4	.529	1.000	.97	1.14	H3-58
		2	4	.697	.999	2.65	2.05	H3-59
		10	0	.516	.998	2.70	1.02	H3-76
		2	-4	.534	1.000	1.62	1.01	H3-55
		0	0	.533	1.000	1.36	1.14	H3-38
		0	0	.815	.996	6.60	2.91	H3-40
		2	8	.316	1.000	.25	.41	H3-66
		2	8	.694	1.000	1.50	2.06	H3-64
		-2	0	.317	1.001	.29	.42	H3-46
		4	0	.298	.970	.99	.26	H3-47
		-2	0	.823	.996	6.22	2.84	H3-45
		2	8	.807	.998	3.95	2.91	H3-63
		2	-8	.690	.995	5.23	1.78	H3-69
		2	-8	.837	.975	12.48	2.87	H3-71
		2	-4	.312	1.000	.52	.38	H3-56
		-2	0	.881	.994	8.72	3.52	H3-42
		0	0	.706	.999	3.30	2.08	H3-39

Table 4-1b (Continued)

	M_o	α	β	$^m/_{m*}$	NR	K	L	CASE
	.6	-1	0	.877	.994	8.04	3.48	H3-41
		4	0	.697	.998	4.73	1.99	H3-49
		-2	0	.714	.999	2.67	2.11	H3-44
		2	-8	.525	.998	2.86	1.05	H3-68
		-2	0	.540	1.000	1.09	1.15	H3-45
		2	-8	.787	.986	8.71	2.43	H3-70
		4	0	.529	1.000	1.95	1.10	H3-48
		4	0	.808	.996	6.94	2.82	H3-50
		4	0	.872	.994	8.16	3.37	H3-51
	.7	4	0	.765	.997	6.06	2.54	H3-14
		10	0	.751	.993	6.13	2.22	H3-80
		-4	0	.595	1.000	1.62	1.46	H3-8
		-4	0	.350	1.001	.38	.48	H3-7
		4	0	[illegible]	.999	2.68	1.38	H3-15
		0	8	.912	.997	6.01	4.18	H3-31
		0	-8	.760	.990	8.06	2.17	H3-34
		0	0	.336	.981	.92	.35	H3-6
		0	-4	.345	1.000	.67	.45	H3-17
		0	4	.910	.997	6.89	4.04	H3-22
		0	4	.346	1.001	.29	.41	H3-26
		0	-4	.588	1.000	2.35	1.36	H3-18
		0	-8	.584	.997	3.46	1.25	H3-35
		0	0	.906	.994	9.37	3.96	H3-2
		0	0	.884	.995	8.77	3.69	H3-[illegible]
		0	0	.775	.998	5.14	2.68	H3-4
		-4	0	.783	.998	3.84	2.69	H3-9
		4	0	.335	.956	1.63	.33	H3-1[illegible]
		0	0	.590	1.000	2.00	1.44	H3-5
		0	8	.763	.999	2.47	2.65	H3-[illegible]9
		0	4	.770	.999	4.07	2.62	H3-24
		0	4	.881	.997	6.25	3.69	H3-23
		0	8	.341	1.000	.25	.52	H3-27
		0	-8	.845	.967	15.59	3.16	H3-33
		0	-4	.905	.990	8.93	3.50	H3-21
		0	-8	.888	.960	19.76	3.43	H3-32
		0	-8	.346	1.000	.95	.40	H3-36
		10	0	.905	.989	9.94	3.56	H3-82
		-4	0	.906	.994	9.42	3.92	H3-11
		4	0	.878	.994	8.45	3.55	H3-13

Table 4-1b (Continued)

	M_o	α	β	m/m*	NR	K	L	CASE
	.7	-4	0	.890	.995	8.82	3.73	H3-10
		10	0	.859	.991	8.45	3.07	H3-81
		0	4	.587	1.000	1.52	1.47	H3-[illegible]
		10	0	.316	.903	4.71	.54	H3-78
		10	0	.548	.966	8.59	.73	H3-79
		0	8	.877	.997	5.04	3.71	H3-30
		0	-4	.881	.992	7.98	3.27	H3-20
		4	0	.905	.992	9.11	3.89	H3-12
		0	8	.584	1.000	.66	1.49	H3-28
		0	-4	.775	.997	5.15	2.66	H3-19
	.8	-4	0	.899	.987	9.62	3.88	H3-91
		4	0	.718	.858	23.91	1.46	H4-1
		0	4	.796	.987	6.56	2.87	H4-11
		0	0	.305	.927	1.78	.41	H3-87
		0	0	.614	.979	6.73	1.27	H3-86
		0	-4	.615	.996	3.17	1.54	H4-7
		10	0	.445	.834	11.84	.65	H4-6
		-4	0	.640	.996	4.36	1.02	H3-89
		0	4	.897	.983	9.71	3.92	H4-10
		4	0	.858	.957	14.52	3.05	H4-3
		0	0	.893	.977	11.58	3.69	H3-83
		0	0	.900	.982	17.89	3.73	H3-84
		0	4	.573	.985	3.49	1.58	H4-12
		10	0	.706	.872	20.68	1.82	H4-4
		4	0	.744	.948	13.52	1.81	H4-[illegible]
		10	0	.593	.854	17.54	1.04	H4-5
		-4	0	.369	.994	2.36	.49	H3-88
		-4	0	.899	.987	9.65	3.90	H3-92
		0	0	.805	.977	9.79	2.71	H3-85
		0	-4	.904	.986	9.77	3.60	H4-9
		-4	0	.826	.990	7.63	3.04	H3-90
		0	-4	.808	.992	6.02	2.81	H4-8
	.85	0	0	.569	.907	9.47	1.01	H4-13
		0	4	.820	.984	7.08	2.91	H4-[illegible]
		-4	0	.806	.962	11.11	2.61	H4-17
		0	0	.825	.910	18.42	3.08	H4-15
		0	4	.893	.975	9.87	3.77	H4-18
		0	0	.736	.913	15.36	1.88	H4-14

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Table 4-1b (Continued)

	M_o	α	β	m/m^*	NR	K	L	CASE
	.85	4	0	.704	.845	18.49	2.13	H4-21
		0	-4	.896	[illegible]	[illegible]	3.21	[illegible]
		0	4	[illegible]	.986	[illegible]	[illegible]	[illegible]
		0	-4	.627	.987	3.16	1.53	H4-25
		0	-4	[illegible]	.983	6.00	2.80	H4-24
		4	0	.605	.833	[illegible]	1.36	H4-20
		-4	0	.616	[illegible]	7.14	1.26	H4-18
		0	-4	[illegible]	[illegible]	6.08	2.78	[illegible]
		4	0	.473	.824	10.23	.75	H4-19
		-4	0	.874	.955	13.30	3.46	[illegible]

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Table 4-1c
Ryan XV-5A 1/5 Scale Inlet Model
Performance Summary
Configuration C1I1S0B1E2

	M_o	α	β	m/m^*	NR	K	L	CASE
	0	0	0	.600	.987	6.24	2.14	L6-6
		0	0	.677	.983	7.96	2.83	L6-7
		0	0	.749	.977	10.25	3.61	L6-11
	.15	0	0	.518	.997	2.38	1.34	L7-1
		-4	0	.518	.997	2.39	1.33	L7-2
		-10	0	.518	.997	2.13	1.31	L7-3
		-20	0	.516	.998	2.15	1.28	L7-4
		4	0	.515	.996	2.45	1.30	L7-5
		10	0	[illegible]	.996	2.80	1.31	L7-6
		20	0	[illegible]	.995	2.89	1.30	L7-7
		0	-4	.518	.996	2.21	1.29	L7-8
		0	-10	.515	.994	3.17	1.37	L7-9
		0	4	.519	.998	2.49	1.27	L7-10
		0	10	.518	.998	2.08	1.31	L7-11
		4	10	.516	.998	2.41	1.30	L7-12
		4	4	.518	.997	2.79	1.32	L7-13
		4	-4	.516	.996	2.29	1.27	L7-14
		4	-10	.515	.992	3.55	1.40	L7-15
		-4	-10	.527	.994	2.94	1.26	L7-16
		-4	-4	.515	.996	2.17	1.23	L7-17
		-4	+4	.521	.998	2.34	1.27	L7-18
		-4	10	.526	.999	1.86	1.25	L7-19
		0	0	.516	.997	2.38	1.27	L7-20
		0	0	.667	.993	4.22	2.24	L8-1
		-4	0	.666	.993	4.02	2.25	L8-2
		-10	0	.666	.993	3.83	2.29	L8-3
		-20	0	.668	.994	4.05	2.29	L8-4
		4	0	.669	.993	4.36	2.25	L8-5
		10	0	.670	.992	4.34	2.25	L8-6
		20	0	.669	.990	4.59	2.30	L8-7
		0	-4	.670	.992	3.94	2.22	L8-8
		0	-10	.668	.987	6.26	2.40	L8-9
		0	4	.670	.994	4.43	2.32	L8-10
		0	10	.669	.995	4.71	2.30	L8-11
		4	10	.670	.995	4.91	2.32	L8-12
		4	4	.670	.994	4.61	2.32	L8-13
		4	-4	.668	.991	3.99	2.23	L8-14
		4	-10	.669	.986	6.49	2.40	L8-15
		-4	-10	.669	.988	5.85	2.29	L8-16

Table 4-1c (Continued)

	M_o	α	β	m/m^*	NR	K	L	CASE
	.15	-4	-4	.667	.992	3.74	2.16	L8-17
		-4	4	.673	.994	4.23	2.23	L8-18
		-4	10	.669	.995	4.43	2.24	L8-19
		0	0	.670	.993	4.13	2.17	L8-20
		0	0	.740	.990	5.17	2.75	L9-1
		-4	0	.740	.991	4.99	2.75	L9-2
		-10	0	.740	.991	4.79	2.75	L9-3
		-20	0	.739	.992	5.26	2.85	L9-4
		4	0	.740	.990	5.20	2.76	L9-5
		10	0	.739	.989	5.31	2.76	L9-6
		20	0	.739	.986	5.70	3.03	L9-7
		0	-4	.739	.988	4.83	2.92	L9-8
		0	-10	.739	.982	8.54	3.15	L9-9
		0	4	.738	.991	5.83	3.08	L9-10
		0	10	.739	.992	6.29	3.08	L9-11
		4	10	.739	.992	6.37	3.07	L9-12
		4	4	.739	.991	5.99	3.07	L9-13
		4	-4	.740	.987	5.37	2.91	L9-14
		4	-10	.740	.981	3.75	3.16	L9-15
		-4	-10	.738	.983	8.12	3.03	L9-16
		-4	-4	.740	.989	4.93	2.84	L9-17
		-4	4	.740	.991	5.55	2.96	L9-18
		-4	10	.738	.993	5.84	2.91	L9-19
		0	0	.740	.990	5.23	2.84	L9-20
		20	0	.739	.986	5.99	3.05	L9-22
	0	0	0	.374	.995	2.22	.83	L6-2
		0	0	.524	.990	4.59	1.63	L6-3

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Table 4-1d
Ryan XV-5A 1/5 Scale Inlet Model
Performance Summary
Configuration C1I1S0B0E2

	M_o	α	β	$^m/_{m*}$	NR	K	L	CASE
	0	0	0	.374	.995	2.29	.84	L6-1
		0	0	.527	.990	4.57	1.65	L6-4
		0	0	.597	.987	5.94	2.13	L6-5
		0	0	.678	.984	8.04	2.85	L6-8
		0	0	.750	.979	10.24	3.59	L6-9
		0	0	.750	.978	10.09	3.59	L6-10
	.15	0	0	.739	.991	5.44	2.86	L9-21

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Table 4-1c
Ryan XV-5A 1/5 Scale Inlet Model
Performance Summary
Configuration C110S0B1E2

	M_o	α	β	$^m/_{m*}$	NR	K	L	CASE
	0	0	0	.389	.993	2.42	.72	L11-8
				.526	.987	5.40	1.65	L11-5
				.599	.982	7.20	2.26	L11-4
				.678	.975	9.74	2.82	L11-1
				.749	.971	12.19	3.67	L11-9
				.750	.974	10.77	3.29	L11-10
				.739	.972	11.78	3.47	L11-12
				.827	.970	13.26	3.92	L11-11
				.819	.964	15.03	4.19	L11-13
				.813	.962	15.28	4.14	L11-14
				.816	.964	15.16	4.24	L11-15
	.15	0	0	.518	.996	2.59	1.19	L12-1
		-4	0	.518	.996	2.53	1.19	L12-2
		-10	0	.516	.996	2.55	1.17	L12-3
		-20	0	.520	.997	2.33	1.19	L12-4
		4	0	.520	.996	2.67	1.16	L12-5
		10	0	.518	.996	2.83	1.17	L12-6
		20	0	.516	.994	3.08	1.21	L12-7
		0	-4	.517	.996	2.55	1.18	L12-8
		0	-10	.519	.992	3.52	1.31	L12-9
		0	4	.520	.997	2.64	1.18	L12-10
		0	10	.520	.998	2.26	1.17	L12-11
		4	10	.518	.997	2.66	1.15	L12-12
		4	4	.517	.997	2.79	1.18	L12-13
		4	-4	.516	.995	2.40	1.11	L12-14
		4	-10	.509	.991	3.86	1.29	L12-15
		-4	-10	.512	.993	3.19	1.20	L12-16
		-4	-4	.517	.996	2.40	1.10	L12-17
		-4	4	.494	.997	2.51	1.16	L12-18
		-4	10	.519	.998	1.98	1.16	L12-19
		0	0	.519	.996	2.43	1.13	L12-20
		0	0	.667	.991	4.71	2.08	L13-1
		-4	0	.666	.992	4.50	2.06	L13-2
		-10	0	.668	.992	4.45	2.17	L13-3
		-20	0	.670	.993	4.53	2.19	L13-4
		4	0	.669	.991	4.76	2.20	L13-5
		10	0	.669	.989	4.72	2.25	L13-6
		20	0	.668	.987	5.30	2.40	L13-7
		0	-4	.669	.989	4.63	2.27	L13-8

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Table 4-1e (Continued)

	M_o	α	β	m/m^*	NR	K	L	CASE
	.15	0	-10	.666	.983	7.15	2.46	L13-9
		0	4	.668	.993	4.81	2.20	L13-10
		0	10	.667	.994	4.63	2.20	L13-11
		4	10	.669	.994	4.81	2.21	L13-12
		4	4	.671	.992	4.70	2.17	L13-13
		4	-4	.668	.988	4.95	2.32	L13-14
		4	-10	.668	.981	7.76	2.53	L13-15
		-4	-10	.665	.985	6.70	2.44	L13-16
		-4	-4	.667	.990	4.50	2.20	L13-17
		-4	4	.668	.993	4.75	2.15	L13-18
		-4	10	.669	.994	4.63	2.17	L13-19
		0	0	.669	.991	4.65	2.10	L13-20
		0	0	.741	.988	5.92	2.75	L14-1
		-4	0	.740	.989	5.74	2.69	L14-2
		-10	0	.740	.989	5.64	2.69	L14-3
		-20	0	.741	.990	5.30	2.63	L14-4
		4	0	.742	.987	5.92	2.74	L14-5
		10	0	.741	.986	6.00	2.85	L14-6
		20	0	.746	.982	7.32	3.09	L14-7
		0	-4	.746	.985	6.39	2.98	L14-8
		0	-10	.736	.977	9.57	3.09	L14-9
		0	4	.743	.990	6.10	2.68	L14-10
		0	10	.740	.991	6.07	2.72	L14-11
		4	10	.738	.991	6.16	2.68	L14-12
		4	4	.739	.989	6.03	2.66	L14-13
		4	-4	.741	.984	6.97	2.99	L14-14
		4	-10	.738	.976	10.14	3.13	L14-15
		-4	-10	.740	.979	9.13	3.06	L14-16
		-4	-4	.741	.986	6.03	2.86	L14-17
		-4	+4	.739	.990	5.79	2.63	L14-18
		-4	-10	.740	.992	6.24	2.70	L14-19
		0	0	.738	.988	5.72	2.67	L14-20
		0	0	.739	.989	5.61	2.71	L14-21
		-4	0	.738	.990	5.43	2.64	L14-22
		-10	0	.738	.990	5.35	2.61	L14-23
		-20	0	.740	.990	5.25	2.61	L14-24
		4	0	.740	.988	5.74	2.75	L14-25
		10	0	.739	.986	5.78	2.86	L14-26
		20	0	.741	.983	6.94	3.03	L14-27
		0	-4	.740	.986	6.05	2.93	L14-28

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Table 4-1e (Continued)

	M_o	α	β	m/m^*	NR	K	L	CASE
	.15	0	-10	.739	.979	9.[illegible]	3.11	L14-29
		0	-4	.741	.990	[illegible].83	2.69	L14-30
		0	10	.739	.99[illegible]	5.97	2.75	L14-31
		0	0	.739	.989	5.54	2.69	L14-32
		0	0	.821	.984	7.19	3.63	L15-1
		-4	0	.817	.984	7.26	3.56	L15-2
		-10	0	.815	.985	7.40	3.47	L15-3
		-20	0	.812	.986	6.78	3.42	L15-4
		4	0	.808	.983	7.[illegible]9	3.6[illegible]	L15-5
		10	0	.804	.980	7.90	3.7[illegible]	L15-6
		20	0	.801	.976	9.71	3.88	L15-7
		0	-4	.793	.980	8.87	3.70	L15-8
		0	-10	.787	.971	12.19	3.70	L15-9
		0	4	.821	.985	7.39	3.46	L15-10
		0	10	.826	.988	7.97	3.57	L15-11
		4	10	.826	.987	8.14	3.56	L15-12
		4	4	.820	.984	7.43	3.48	L15-13
		4	-4	.812	.978	9.39	3.73	L15-14
		0	0	.819	.983	7.26	3.55	L15-15
		0	0	.819	.984	7.30	3.59	L15-16

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Table 4-1f
Ryan XV-5A 1/5 Scale Inlet Model
Performance Summary
Configuration C110S0B0E2

	M_o	α	β	m/m^*	NR	K	L	CASE
	0	0	0	.378	.993	2.57	.83	L11-7
		0	0	.525	.987	5.52	1.70	L11-6
		0	0	.600	.982	7.17	2.33	L11-5
		0	0	.679	.977	9.27	3.01	L11-2

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Table 4-1g
Ryan XV-5A 1/5 Scale Inlet Model
Performance Summary
Configuration C1I2S2B1E2

	M_o	α	β	m/m^*	NR	K	L	CASE
	0	0	0	.379	.995	2.35	.48	L1-13
		0	0	.379	.993	2.73	.50	L1-14
		0	0	.524	.989	4.87	1.16	L1-7
		0	0	.524	.989	4.86	1.04	L1-8
		0	0	.599	.987	6.21	1.45	L1-5
		0	0	.599	.987	6.43	1.47	L1-6
		0	0	.599	.987	5.75	2.01	L1-22
		0	0	.676	.979	8.23	2.60	L1-23
		0	0	.680	.979	7.93	2.59	L1-26
		0	0	.677	.983	7.60	1.77	L1-16
		0	0	.748	.975	10.49	2.13	L1-17
		0	0	.750	.975	9.86	2.45	L1-20
		0	0	.750	.979	9.62	3.53	L1-24
		0	0	.738	.980	13.58	3.29	L1-25
		0	0	.801	.975	11.01	2.83	L1-21
	.15	0	0	.518	.997	2.36	.85	L2-1
		-4	0	.519	.997	2.25	.86	L2-2
		-10	0	.518	.998	2.09	.85	L2-3
		-20	0	.518	1.007	1.14	.91	L2-4
		4	0	.518	.997	2.50	.85	L2-5
		10	0	.518	.996	2.64	.86	L2-6
		20	0	.519	.995	2.95	.89	L2-7
		0	-4	.519	.997	2.16	.80	L2-8
		0	-10	.519	.995	2.78	.83	L2-9
		0	4	.518	.997	2.29	.76	L2-10
		0	10	.518	.998	2.01	.81	L2-11
		4	10	.518	.997	1.95	.81	L2-12
		4	-4	.519	.996	2.23	.87	L2-14
		4	4	.520	.997	2.40	.81	L2-13
		4	-10	.519	.993	3.40	.93	L2-15
		4	-10	.520	.993	3.32	.96	L2-15r
		-4	-10	.517	.996	2.55	.94	L2-16
		-4	-4	.517	.997	2.18	.88	L2-17
		-4	-4	.519	.997	2.21	.90	L2-18
		-4	+4	.518	.998	2.31	.90	L2-19
		-4	10	.518	.998	1.76	.89	L2-20
		0	0	.518	.997	2.40	1.40	L2-21
		0	0	.669	.994	4.16	1.40	L3-1
		-4	0	.670	.994	4.16	1.50	L3-2

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Table 4-1g (Continued)

	M_o	α	β	$^m/_{m*}$	NR	K	L	CASE
	.15	-10	0	.670	.995	4.14	1.51	L3-3
		-20	0	.669	.996	3.75	1.52	L3-4
		4	0	.669	.993	4.10	1.55	L3-5
		10	0	.669	.992	4.8	1.56	L3-6
		20	0	.671	.989	5.33	1.65	L3-7
		0	-4	.669	.993	4.12	1.54	L3-8
		0	-10	.668	.989	6.00	1.62	L3-9
		0	4	.670	.995	4.07	1.48	L3-10
		0	10	.669	.995	3.32	1.40	L3-11
		4	10	.668	.995	3.49	1.46	L3-12
		4	4	.668	.994	4.14	1.51	L3-13
		4	-4	.669	.993	4.10	1.54	L3-14
		4	-10	.667	.987	6.62	1.62	L3-15
		-4	-10	.668	.991	5.39	1.59	L3-16
		-4	-4	.668	.994	4.07	1.51	L3-17
		-4	4	.669	.995	3.95	1.48	L3-18
		-4	10	.669	.996	3.29	1.48	L3-19
		0	0	.669	.994	4.00	1.50	L3-20
		0	0	.667	.994	4.40	2.56	L3-21
		0	0	.738	.991	5.76	2.23	L4-1
		-4	0	.744	.991	5.74	2.23	L4-2
		-10	0	.738	.993	5.21	2.11	L4-3
		-20	0	.738	.995	4.93	2.11	L4-4
		4	0	.739	.991	5.52	2.17	L4-5
		10	0	.741	.990	5.32	2.21	L4-6
		20	0	.740	.987	7.15	2.30	L4-7
		0	-4	.740	.991	4.60	2.16	L4-8
		0	-10	.738	.985	7.97	2.32	L4-9
		0	4	.733	.993	5.29	2.12	L4-10
		0	10	.739	.993	4.29	2.10	L4-11
		4	10	.739	.993	4.8	2.10	L4-12
		4	4	.739	.992	5.40	2.14	L4-13
		4	-4	.741	.990	5.35	2.21	L4-14
		4	-10	.740	.983	2.64	2.36	L4-15
		-4	-10	.741	.987	7.32	2.24	L4-16
		-4	-4	.742	.991	5.07	2.19	L4-17
		-4	4	.739	.993	5.27	2.13	L4-18
		-4	10	.739	.994	4.80	2.12	L4-19
		0	0	.740	.990	6.22	2.17	L4-20
		0	0	.739	.992	5.49	2.13	L4-21

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Table 4-1g (Continued)

	M_o	α	β	m/m^*	NR	K	L	CASE
	.15	-4	0	.739	.99[illegible]	5.43	[illegible].15	L4-[illegible]
		-10	0	.740	.993	5.29	[illegible].09	L4-2[illegible]
		4	0	.739	.991	5.55	[illegible].15	L4-24
		10	0	.738	.990	5.31	[illegible].16	L4-2[illegible]
		0	-4	.735	.991	[illegible]	[illegible]	L4-[illegible]
		0	-10	.7[illegible]8	.986	7.66	[illegible].18	L4-[illegible]7
		0	4	.74[illegible]	.993	5.4[illegible]	[illegible].09	L4-[illegible]
		0	10	.743	.994	4.36	[illegible].09	L4-[illegible]
		0	0	.7[illegible]3	.99[illegible]	5.55	[illegible].09	L4-3[illegible]
		0	0	.740	.99[illegible]	5.47	1.91	L4-[illegible]
		0	0	.740	[illegible]	5.59	3.33	L4-[illegible]
		-4	0	.737	.99[illegible]	5.43	3.30	L4-[illegible]4
		-10	0	.739	.993	5.[illegible]8	3.[illegible]8	L4-3[illegible]
		4	0	.73[illegible]	.991	5.[illegible]	3.33	L4-3[illegible]
		10	0	.740	.990	5.3[illegible]	3.[illegible]8	L4-37
		0	0	.8[illegible]	.989	6.83	[illegible]	L[illegible]
		-4	0	.8[illegible]	.98[illegible]	6.9[illegible]	[illegible]	L5-3
		-10	0	.815	.990	6.88	[illegible].50	L5-4
		-20	0	.830	.99[illegible]	6.54	[illegible].50	L5-[illegible]
		4	0	.81	.989	6.[illegible]8	[illegible].48	L5-6
		10	0	.81[illegible]	.987	6.79	[illegible].50	L5-7
		20	0	.807	.98[illegible]	9.04	[illegible].0[illegible]	L5-8
		0	-4	.80[illegible]	.987	6.54	[illegible].48	L5-9
		0	-10	.804	.981	9.84	[illegible].55	L5-10
		0	4	.819	.989	7.[illegible]7	[illegible].47	L5-11
		0	10	.814	.991	5.78	[illegible].47	L5-1[illegible]
		4	10	.8[illegible]4	.991	6.39	[illegible].49	L5-13
		4	4	.819	.988	7.45	[illegible].47	L5-14
		4	-4	.808	.98[illegible]	7.41	[illegible].49	L5-1[illegible]
		4	-10	.799	.979	10.44	[illegible].59	L5-1[illegible]
		-4	-10	.80[illegible]	.983	9.[illegible]3	[illegible].51	L5-17
		-4	-4	.813	.988	6.45	[illegible].46	L5-18
		-4	4	.817	.990	7.04	[illegible].47	L5-19
		-4	10	.8[illegible]1	.99[illegible]	5.93	[illegible].49	L5-[illegible]0
		0	0	.817	.989	6.63	[illegible].46	L5-[illegible]1
	[illegible]	0	0	.595	.999	2.51	1.8[illegible]	H5-14
		0	0	.510	.999	1.79	1.[illegible]5	H5-1[illegible]
		0	0	.385	1.000	.83	.68	H5-1[illegible]

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Table 4-1g (Continued)

	M_o	α	β	m/m^*	NR	K	L	CASE
	.6	0	0	.685	.996	3.48	2.67	H5-12
		0	0	.807	.997	5.16	3.89	H5-13
		0	0	.526	.999	1.61	1.39	H5-11
	.7	0	0	.755	.990	23.72	3.56	H5-2
		0	0	.858	.984	34.48	5.41	H5-1
		0	0	.592	.999	12.37	1.80	H5-3
	.8	0	0	.887	.980	10.60	6.05	H5-8
		0	0	.619	.984	5.84	2.02	H5-10
		0	0	.797	.979	9.38	4.15	H5-9

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Table 4-1h
Ryan XV-5A 1/5 Scale Inlet Model
Performance Summary
Configuration C1I2S2B0E2

	M_o	α	β	m/m*	NR	K	L	CASE
	0	0	0	.378	.994	2.60	.49	L1-11
		0	0	.378	.993	2.66	.50	L1-12
		0	0	.524	.990	4.80	1.07	L1-9
		0	0	.524	.990	4.74	1.12	L1-10
		0	0	.600	.987	6.57	1.48	L1-3
		0	0	.600	.987	6.42	1.46	L1-4
		0	0	.679	.984	8.16	1.95	L1-1
		0	0	.678	.981	8.70	1.95	L1-2
		0	0	.678	.983	8.29	1.81	L1-15
		0	0	.749	.974	11.21	2.30	L1-18

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Table 4-11
Ryan XV-5A 1/5 Scale Inlet Model
Performance Summary
Configuration C2I1S1B1E2

	M_o	α	β	$^m/_{m*}$	NR	K	L	CASE
	.15	0	0	.739	.992	4.70	2.60	L36-1
		-10	0	.740	.992	4.70	2.71	L36-2
		-20	0	.747	.993	4.32	2.75	L36-3
		10	0	.735	.990	4.97	2.68	L36-4
		20	0	.738	.987	5.43	2.77	L36-5
		0	-10	.738	.983	8.01	2.96	L36-6
		0	10	.745	.993	5.62	2.77	L36-7
		0	0	.831	.987	5.90	3.55	L37-1
		-10	0	.826	.989	5.81	3.55	L37-2
		10	0	.817	.983	7.60	3.57	L37-3
		20	0	.816	.982	7.67	3.72	L37-4

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Table 4-1j
Ryan XV-5A 1/5 Scale Inlet Model
Performance Summary
Configuration C1I1S1B1E1

M_o	α	β	$^m/_{m*}$	NR	K	L	CASE
.15	0	0	.668	.970	14.74	2.13	L25-20
	0	0	.740	.964	17.75	2.23	L17-1
	-4	0	.741	.964	17.64	2.23	L17-2
	-10	0	.739	.963	17.72	2.22	L17-3
	4	0	.739	.965	17.52	2.15	L17-4
	10	0	.740	.965	17.68	2.17	L17-5
	0	-4	.740	.968	16.42	2.21	L17-6
	0	-10	.741	.972	14.35	2.14	L17-7
	0	4	.740	.961	19.37	2.32	L17-8
	0	10	.738	.954	20.85	2.39	L17-9
	4	4	.739	.962	19.13	2.31	L17-10
	4	-4	.741	.968	16.44	2.22	L17-11
	-4	-4	.741	.968	16.53	2.20	L17-12
	-4	4	.739	.960	19.04	2.26	L17-13
	0	0	.740	.964	17.61	2.67	L23-1
	0	0	.739	.961	19.41	3.04	L23-22
	0	0	.817	.954	24.31	3.50	L18-1
	-4	0	.817	.953	24.33	3.52	L18-2
	-10	0	.816	.952	24.93	3.58	L18-3
	4	0	.819	.954	23.87	3.39	L18-4
	10	0	.816	.953	24.19	3.43	L18-5
	0	-4	.817	.958	22.76	3.33	L18-6
	0	-10	.821	.962	20.33	3.17	L18-7
	0	4	.8[illegible]8	.951	25.88	3.60	L18-8
	0	10	.814	.942	28.24	3.99	L18-9
	0	0	.813	.954	23.98	4.14	L24-1

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Table 4-1k
Ryan XV-5A 1/5 Scale Inlet Model
Performance Summary
Configuration C1IOS1B1E1

	M_o	α	β	$^m/_{m*}$	NR	K	L	CASE
	.15	0	0	.738	.960	19.22	2.43	L20-8
		0	0	.812	.948	26.54	3.78	L21-14
	.4	0	4	.657	.999	2.60	1.92	H4-92
		0	-4	.602	.999	2.42	1.52	H4-90
		0	-4	.663	.998	3.07	1.88	H4-91
		0	-4	.514	.999	1.46	1.09	H4-89
		0	4	.603	.999	2.03	1.46	H4-93
		0	0	.516	.999	1.62	1.15	H4-82
		0	0	.641	.998	1.99	1.82	H4-80
		0	0	.610	.998	1.93	1.63	H4-81
		-4	0	.523	.998	1.96	1.21	H4-83
		-4	0	.610	.998	2.22	1.66	H4-84
		-4	0	.673	.997	2.54	2.03	H4-85
		4	0	.663	.998	2.14	1.93	H4-86
		4	0	.605	.998	1.74	1.55	H4-87
	.6	4	0	.475	.965	2.26	1.14	H4-51
		4	0	.673	.993	2.95	2.01	H4-52
		0	-4	.799	.996	7.95	3.17	H4-54
		4	0	.791	.995	6.54	3.12	H4-53
		0	-4	.696	.999	2.17	2.01	H4-55
		0	0	.514	.987	3.88	1.28	H4-45
		0	0	.684	.995	3.37	2.18	H4-46
		0	0	.800	.995	6.89	3.24	H4-47
		0	4	.677	.993	8.88	2.67	H4-58
		0	4	.786	.991	11.23	3.36	H4-59
		0	-4	.523	1.000	.96	1.10	H4-56
		-4	0	.806	.993	11.13	3.59	H4-48
		-4	0	.695	.996	3.54	2.25	H4-49
		-4	0	.527	.998	1.83	1.52	H4-50
		0	4	.515	.997	3.49	1.32	H-457
	.7	0	-1	.870	.990	13.50	4.57	H4-29
		0	-1	.556	.970	2.96	1.55	H4-31
		0	-4	.764	.998	2.28	2.54	H4-40
		0	4	.752	.991	10.21	3.06	H4-43
		0	4	.862	.986	15.83	4.51	H4-42
		0	-4	.877	.993	13.13	4.27	H4-41
		-4	-1	.877	.988	17.58	4.92	H4-34

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Table 4-1k (Continued)

	M_o	α	β	m/m^*	NR	K	L	CASE
	.7	0	4	.575	.995	4.61	1.76	H4-44
		4	0	.852	.984	13.12	4.10	H4-36
		4	0	.515	.940	3.47	1.43	H4-38
		0	-4	.548	.964	2.19	.89	H4-39
		-4	-1	.772	.994	10.80	3.37	H4-33
		-4	-1	.586	.998	2.46	1.51	H6-32
		4	0	.732	.977	6.61	2.73	H4-37
		0	-1	.767	.995	9.03	3.19	H4-30

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Table 4-1ℓ
Ryan XV-5A 1/5 Scale Inlet Model
Performance Summary
Configuration C1I2S2B1E1

	M_o	α	β	m/m^*	NR	K	L	CASE
	.15	0	10	.739	.990	4.92	3.29	L4-42
		4	0	.740	.991	6.38	3.52	L4-43
		-4	0	.740	.993	5.67	3.39	L4-44
		-4	-4	.742	.992	6.19	3.51	L4-45
		-4	-10	.743	.991	4.20	3.48	L4-46
		-4	4	.741	.994	4.30	3.23	L4-47
		-4	10	.740	.990	5.36	3.26	L4-48
		0	0	.824	.991	7.55	2.59	L5-1
		0	0	.668	.999	3.70	22.67	L3-22
		0	-4	.668	.994	3.99	2.72	L3-23
		0	-10	.668	.994	3.62	24.49	L3-24
		0	4	.666	.994	4.80	2.62	L3-25
		0	10	.666	.988	6.18	23.01	L3-26
		0	0	.740	.993	6.17	1.91	L4-32
		0	0	.743	.992	6.36	3.51	L4-38
		0	-4	.741	.991	5.86	3.54	L4-39
		0	-10	.744	.989	5.27	3.40	L4-40
		0	4	.740	.993	5.64	3.26	L4-41
	.7	0	0	.730	.972	8.53	3.14	H5-5
		0	0	.569	.984	4.24	1.58	H5-4
		0	0	.826	.964	11.30	4.82	H5-6

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Table 4-1m
Ryan XV-5A 1/5 Scale Inlet Model
Performance Summary
Configuration C1IOSOB1E1

	M_o	α	β	m/m^*	NR	K	L	CASE
	.15	0	0	.740	.994	2.79	2.59	L14-33
		0	0	.827	.990	7.48	3.37	L15-17

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TABLE 4-2
REPEATABILITY OF INLET MODEL TEST RESULTS

C I S B E	M_o	α	β	m/m^*	NR	K	L	CASE
11112	0	0	0	.750	.979	9.71	10.21	L22-1
				.746	.979	10.71	4.17	L22-5
	.15	0	0	.743	.992	4.81	3.03	L23-2
				.742	.991	5.20	3.44	L23-21
	.8	0	0	.912	.982	9.32	5.80	H1-26
				.914	.982	9.35	5.78	H1-25
10112	0	0	0	.750	.971	12.67	3.57	L19-2
				.752	.972	12.36	3.68	L19-3
	.8	-4	0	.899	.987	9.62	3.88	H3-91
				.899	.987	9.65	3.90	H3-92
				.893	.977	11.58	3.69	H3-83
				.900	.982	17.89	3.75	H3-84
	.85	0	-4	.822	.983	6.00	2.80	L4-24
				.822	.982	6.08	2.78	L4-23
11012	.15	0	0	.518	.997	2.38	1.34	L7-1
				.516	.997	2.38	1.27	L7-20
	.15	0	0	.740	.990	5.17	2.75	L9-1
				.740	.990	5.23	2.84	L9-20
	.15	20	0	.739	.986	5.7	3.03	L9-7
				.739	.986	5.99	3.05	L9-22
11002	0	0	0	.750	.979	10.24	3.59	L6-9
				.750	.978	10.09	3.59	L6-10
10012	0	0	0	.749	.971	12.19	3.67	L11-9
				.750	.974	10.77	3.29	L11-10
	0	0	0	.819	.964	15.03	4.19	L11-13
				.816	.964	15.16	4.24	L11-15
	.15	0	0	.518	.996	2.59	1.19	L12-1
				.519	.996	2.43	1.13	L12-20
	.15	-20	0	.741	.990	5.30	2.63	L14-4
				.740	.990	5.25	2.61	L14-24
	.15	-10	0	.740	.989	5.64	2.69	L14-3
				.738	.990	5.35	2.61	L14-23
	.15	-4	-10	.740	.979	9.13	3.06	L14-16
				.740	.992	6.24	2.70	L14-19
	.15	0	-10	.736	.977	9.57	3.09	L14-9
				.739	.979	9.25	3.11	L14-29
	.15	0	-4	.746	.985	6.39	2.98	L14-8
				.740	.986	6.05	2.93	L14-28
				.710	.990	5.83	2.69	L14-30

Table 4-2 (Continued)

C I S B E	M_o	α	β	m/m^*	NR	K	L	CASE
10012	.15	0	0	.741	.988	5.92	2.75	L14-1
				.738	.988	5.72	2.67	L14-20
				.739	.989	5.61	2.71	L14-21
				.739	.989	5.54	2.69	L14-32
	.15	0	0	.819	.983	7.26	3.55	L15-15
				.819	.984	7.30	3.59	L15-16
	.15	-4	0	.74	.989	5.74	2.69	L14-2
				.738	.990	5.43	2.64	L14-22
	.15	0	10	.740	.991	6.07	2.72	L14-11
				.739	.992	5.97	2.75	L14-31
	.15	4	0	.742	.982	5.92	2.74	L14-5
				.740	.988	5.74	2.75	L14-25
	.15	10	0	.741	.986	6.0	2.85	L14-6
				.739	.986	5.78	2.86	L14-26
	.15	20	0	.746	.982	7.32	3.09	L14-7
				.741	.983	6.94	3.03	L14-27
12212	0	0	0	.379	.995	2.35	4.80	L1-13
				.379	.993	2.73	5.00	L1-14
	0	0	0	.524	.989	4.86	1.04	L1-8
				.524	.989	4.87	1.16	L1-7
	0	0	0	.599	.987	6.21	1.45	L1-5
				.599	.987	6.43	1.45	L1-6
				.599	.987	5.75	2.01	L1-22
	0	0	0	.676	.979	8.23	2.60	L1-23
				.680	.979	7.93	2.59	L1-26
				.677	.983	7.60	1.77	L1-16
	0	0	0	.748	.975	10.49	2.13	L1-17
				.750	.975	9.86	2.45	L1-20
				.750	.979	9.62	3.53	L1-24
	.15	-4	-4	.517	.997	2.18	.88	L2-17
				.519	.997	2.21	.90	L2-18
	.15	0	0	.518	.997	2.36	.85	L2-1
				.518	.997	2.40	1.40	L2-21
	.15	4	-10	.519	.993	3.40	.93	L2-15
				.520	.993	3.32	.96	L2-15r
	.15	0	0	.669	.994	4.16	1.4	L3-1
				.669	.994	4.00	1.5	L3-20
				.667	.994	4.40	2.56	L3-21

Table 4-2 (Continued)

C I S B E	M_o	α	β	$^m/_{m*}$	NR	K	L	CASE
12212	.15	-10	0	.738	.993	5.21	2.11	L4-3
				.740	.993	5.29	2.09	L4-23
				.739	.993	5.28	3.28	L4-33
	.15	-4	0	.744	.991	5.74	2.23	L4-2
				.739	.992	5.43	2.15	L4-22
				.737	.992	5.43	3.30	L4-34
	.15	0	-10	.738	.985	7.97	2.32	L4-9
				.738	.986	7.66	2.18	L4-27
	.15	0	-4	.740	.991	4.6	2.16	L4-8
				.735	.991	4.2	2.12	L4-26
	.15	0	0	.738	.991	5.76	2.23	L4-1
				.740	.990	6.22	2.17	L4-20
				.739	.992	5.49	2.13	L4-21
				.743	.992	5.55	2.09	L4-30
				.740	.992	5.47	1.91	L4-31
				.740	.992	5.59	3.38	L4-35
	.15	0	4	.733	.993	5.29	2.12	L4-10
				.742	.993	5.42	2.09	L4-28
	.15	0	10	.739	.993	4.29	2.10	L4-11
				.743	.994	4.36	2.09	L4-29
	.15	4	0	.739	.991	5.52	2.17	L4-5
				.739	.991	5.55	2.15	L4-24
				.739	.991	5.62	3.33	L4-36
	.15	10	0	.741	.990	5.32	2.21	L4-6
				.738	.990	5.31	2.16	L4-25
				.740	.990	5.36	3.28	L4-37
	.15	0	0	.823	.989	6.88	2.59	L5-2
				.817	.989	6.63	2.46	L5-21
12202	0	0	0	.378	.994	2.60	0.49	L1-11
				.378	.993	2.66	0.50	L1-12
	0	0	0	.524	.990	4.80	1.07	L1-9
				.524	.990	4.74	1.12	L1-10
	0	0	0	.600	.987	6.57	1.48	L1-3
				.600	.987	6.42	1.46	L1-4
	0	0	0	.679	.984	8.16	1.95	L1-1
				.678	.981	8.70	1.95	L1-2
				.678	.983	8.29	1.81	L1-15
11111	.15	0	0	.740	.964	17.75	2.23	L17-1
				.740	.964	17.61	2.67	L23-1
				.739	.961	19.41	3.04	L23-22

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Table 4-2 (Continued)

CISBE	M_o	α	β	m/m^*	NR	K	L	CASE
11111	.15	0	0	.817	.954	24.31	3.50	L18-1
				.813	.954	23.98	4.14	L24-1
12211	.15	0	0	.740	.993	6.17	1.91	L4-32
				.743	.992	6.36	3.51	L4-38

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TABLE 4-3

LOW SPEED WIND TUNNEL RUN INDEX, $0 \leq M \leq 0.2$

Configuration C1I1S1B1E2

* **Data Plotted:**

1 means NR, K and L plotted in Figures 4-1 through 4-36 of Volume I.

2 means p/P_t tubes 101 to 130 plotted in Figures 4-37 through 4-47 of Volume I.

3 means C_p tubes 310 to 344 plotted in Figures 4-48 through 4-81 of Volume I.

	M_o	α	β	m/m^*	Data Plotted*	Tabulated Data Page	Tabulated Data Volume	CASE
	0	0	0	.524	1	465	II	L22-3
				.676	1, 2	466		L22-4
				.75	1	467		L22-1
				.746	1	468		L22-5
				.804	1	469		L22-2
	.02	0	-30	.466	1, 2	470		L39-1
			+30	.751	1, 2	471		L39-2
			+30	.828	1, 2	472		L40-1
			-30	.794	1, 2	473		L40-2
	.10	0	0	.520	1	474		L31-1
		-20	0	.521		475		L31-2
		+20	0	.521		476		L31-3
		0	-10	.520		477		L31-4
		0	10	.520		478		L31-5
		-10	0	.521		479		L31-6
		10	0	.521		480		L31-7
		0	0	.674		481		L32-1
		-4	0	.675		482		L32-2
		-10	0	.673		483		L32-3
		-20	0	.672		484		L32-4
		+4	0	.673		485		L32-5
		10	0	.672		486		L32-6
		20	0	.675		487		L32-7
		0	-4	.674		488		L32-8
		0	-10	.672		489		L32-9
		0	+4	.673		490		L32-10
		0	10	.674		491		L32-11
		4	10	.675		492		L32-12
		4	4	.676		493		L32-13
		4	-4	.676		494		L32-14
		4	-10	.672		495		L32-15
		-4	-10	.673		496		L32-16
		-4	-4	.676		497		L32-17
		-4	+4	.673		498		L32-18
		-4	10	.674		499		L32-19
		0	0	.747		500		L33-1
		-4	0	.748		501		L33-2
		-10	0	.752		502		L33-3

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TABLE 4-3 (Continued)
LOW SPEED INDEX
Configuration C1I1S1B1E2

	M_o	α	β	m/m^*	Data Plotted*	Tabulated Data Page	Tabulated Data Volume	CASE
	.10	-20	0	.748	1	503	II	L33-4
		4	0	.752		504		L33-5
		10	0	.747		505		L33-6
		20	0	.75		506		L33-7
		0	-4	.75		507		L33-8
		0	-10	.748		508		L33-9
		0	4	.752		509		L33-10
		0	10	.75		510		L33-11
		4	10	.748		511		L33-12
		4	-10	.747		512		L33-13
		-4	-10	.748		513		L33-14
		-4	+10	.75		514		L33-15
		0	0	.822		515		L34-1
		-4	0	.827		516		L34-2
		-10	0	.822		517		L34-3
		-20	0	.826		518		L34-4
		4	0	.822		519		L34-5
		10	0	.820		520		L34-6
		20	0	.820		521		L34-7
		0	-10	.811		522		L34-8
		0	10	.833		523		L34-9
	.15	0	0	.667		524		L25-1
		-4	0	.669		525		L25-2
		-10	0	.668		526		L25-3
		-20	0	.670		527		L25-4
		4	0	.665		528		L25-5
		10	0	.666		529		L25-6
		20	0	.669		530		L25-7
		0	-4	.667		531		L25-8
		0	-10	.667		532		L25-9
		0	4	.670		533		L25-10
		0	10	.667		534		L25-11
		4	10	.670		535		L25-12
		4	4	.669		536		L25-13
		4	-4	.669		537		L25-14
		4	-10	.668		538		L25-15
		-4	-10	.668		539		L25-16
		-4	-4	.669		540		L25-17
		-4	+4	.671		541		L25-18

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TABLE 4-3 (Continued)
LOW SPEED INDEX
Configuration C1I1S1B1E2

	M_o	α	β	m/m*	Data Plotted*	Tabulated Data Page	Tabulated Data Volume	CASE
	.15	-4	10	.67	1	542	II	L25-19
		0	0	.743		543		L23-2
		-4	0	.737		544		L23-3
		-10	0	.739		545		L23-4
		-20	0	.741		546		L23-5
		4	0	.738		547		L23-6
		10	0	.740		548		L23-7
		20	0	.738	1, 2	549		L23-8
		0	-4	.738	1	550		L23-9
		0	-10	.742		551		L23-10
		0	4	.736		552		L23-11
		0	10	.743		553		L23-12
		4	10	.740		554		L23-13
		4	4	.738		555		L23-14
		4	-4	.743		556		L23-15
		4	-10	.738		557		L23-16
		-4	-10	.737		558		L23-17
		-4	-4	.744		559		L23-18
		-4	+4	.743		560		L23-19
		-4	10	.740		561		L23-20
		0	0	.742		562		L23-21
		0	0	.822		563		L24-2
		-4	0	.824		564		L24-3
		-10	0	.828		565		L24-4
		-20	0	.829		566		L24-5
		4	0	.828		567		L24-6
		10	0	.827		568		L24-7
		20	0	.824		569		L24-8
		0	-4	.824		570		L24-9
		0	-10	.809		571		L24-10
		0	4	.827		572		L24-11
		0	10	.829		573		L24-12
	.20	0	0	.512		574		L27-1
		-4	0	.511		575		L27-2
		-10	0	.511		576		L27-3
		-20	0	.512		577		L27-4
		4	0	.513		578		L27-5
		10	0	.513		579		L27-6
		20	0	.509		580		L27-7

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TABLE 4-3 (Continued)
LOW SPEED INDEX
Configuration C1I1S1B1E2

	M_o	α	β	m/m*	Data Plotted*	Tabulated Data Page	Tabulated Data Volume	CASE
	.2	0	-4	.509	1	581	II	L27-8
		0	-10	.507		582		L27-9
		0	4	.515		583		L27-11
		0	10	.513		584		L27-12
		4	10	.513		585		L27-13
		4	4	.513		586		L27-14
		4	-4	.509		587		L27-15
		4	-10	.512		588		L27-16
		-4	-10	.513		589		L27-17
		-4	-4	.513		590		L27-18
		-4	4	.513		591		L27-19
		-4	10	.508		592		L27-20
		0	0	.663		593		L28-1
		-4	0	.663		594		L28-3
		-10	0	.660		595		L28-4
		-20	0	.661		596		L28-6
		4	0	.660		597		L28-7
		10	0	.658		598		L28-8
		20	0	.660		599		L28-9
		0	-4	.662		600		L28-10
		0	-10	.659		601		L28-11
		0	4	.658		602		L28-12
		0	10	.658		603		L28-13
		4	10	.662		604		L28-14
		4	4	.659		605		L28-15
		4	-4	.658		606		L28-16
		4	-10	.658		607		L28-17
		-4	-10	.658		608		L28-18
		-4	-4	.661		609		L28-19
		-4	4	.660		610		L28-20
		-4	10	.664		611		L28-22
		0	0	.727		612		L29-1
		-4	0	.728		613		L29-2
		-10	0	.728		614		L29-3
		-20	0	.728		615		L29-4
		4	0	.732	1	616		L29-5
		10	0	.733	1, 2	617		L29-6
		20	0	.727	1	618		L29-7
		0	-4	.733	1	619		L29-8
		0	-10	.733	1	620		L29-9

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TABLE 4-3 (Continued)
LOW SPEED INDEX
Configuration C1I1S1B1E2

	M_o	α	β	$^m/m^*$	Data Plotted*	Tabulated Data Page	Tabulated Data Volume	CASE
	.2	0	4	.733	1	621	II	L29-10
		0	10	.733		622		L29-11
		4	10	.721		623		L29-12
		4	4	.732		624		L29-13
		4	-4	.732		625		L29-14
		4	-10	.733		626		L29-15
		-4	-10	.735		627		L29-16
		-4	-4	.741		628		L29-17
		-4	4	.735		629		L29-18
		-4	10	.729		630		L29-19
		0	0	.822		631		L30-2
		-4	0	.824		632		L30-3
		-10	0	.817		633		L30-4
		-20	0	.822		634		L30-5
		4	0	.817		635		L30-6
		10	0	.824		636		L30-7
		20	0	.810		637		L30-8
		0	-4	.822		638		L30-9
		0	-10	.813		639		L30-10
		0	4	.824		640		L30-11
		0	10	.825		641		L30-12
		4	10	.825		642		L30-13
		4	4	.818		643		L30-14
		4	-4	.814		644		L30-15
		4	-10	.806		645		L30-16
		-4	-10	.809		646		L30-17
		-4	-4	.823		647		L30-18
		-4	+4	.821		648		L30-19
		-4	10	.825		649		L30-20

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TABLE 4-3 (Continued)
LOW SPEED INDEX
Configuration C110S1B1E2

	M_o	α	β	m/m^*	Data Plotted*	Tabulated Data Page	Tabulated Data Volume	CASE
	0	0	0	.807	1	363	II	L19-1
		0	0	.750		364		L19-2
		0	0	.752		365		L19-3
		0	0	.794		366		L19-4
	.15	0	0	.740		367		L20-1
		-4	0	.741		368		L20-2
		4	0	.740		369		L20-3
		0	-4	.741		370		L20-4
		0	-10	.740		371		L20-5
		0	4	.740		372		L20-6
		0	10	.742		373		L20-7
		-10	0	.740		374		L20-9
		-20	0	.740		375		L20-10
		10	0	.739		376		L20-11
		20	0	.738		377		L20-12
		0	0	.825		378		L21-1
		-4	0	.823		379		L21-2
		4	0	.822		380		L21-3
		0	-4	.812		381		L21-4
		0	-10	.800		382		L21-5
		0	4	.820		383		L21-8
		0	10	.828		384		L21-7
		0	0	.820		385		L21-9
		-10	0	.830		386		L21-10
		-20	0	.830		387		L21-11
		10	0	.825		388		L21-12
		20	0	.818		389		L21-13

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TABLE 4-3 (Continued)
LOW SPEED INDEX
Configuration C1I1S0B1E2

	M_o	α	β	m/m*	Data Plotted*	Tabulated Data Page	Tabulated Data Volume	CASE
	0	0	0	.374	1	453	II	L6-2
				.524		454		L6-3
		0	0	.600		455		L6-6
		0	0	.677		456		L6-7
		0	0	.749		457		L6-11
	.15	0	0	.518		391		L7-1
		-4	0	.518		392		L7-2
		-10	0	.518		393		L7-3
		-20	0	.516		394		L7-4
		4	0	.515		395		L7-5
		10	0	.516		396		L7-6
		20	0	.525		397		L7-7
		0	-4	.518		398		L7-8
		0	-10	.515		399		L7-9
		0	4	.519		400		L7-10
		0	10	.518		401		L7-11
		4	10	.516		402		L7-12
		4	4	.518		403		L7-13
		4	-4	.516		404		L7-14
		4	-10	.515		405		L7-15
		-4	-10	.527		406		L7-16
		-4	-4	.515		407		L7-17
		-4	+4	.521		408		L7-18
		-4	10	.526		409		L7-19
		0	0	.516		410		L7-20
		0	0	.667		411		L8-1
		-4	0	.666		412		L8-2
		-10	0	.666		413		L8-3
		-20	0	.668		414		L8-4
		4	0	.669		415		L8-5
		10	0	.670		416		L8-6
		20	0	.669		417		L8-7
		0	-4	.670		418		L8-8
		0	-10	.668		419		L8-9
		0	4	.670		420		L8-10
		0	10	.669		421		L8-11

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TABLE 4-3 (Continued)
LOW SPEED INDEX
Configuration C1I1S0B1E2

	M_o	α	β	m/m*	Data Plotted*	Tabulated Data Page	Tabulated Data Volume	CASE
	.15	4	10	.670	1	422	II	L8-12
		4	4	.670		423		L8-13
		4	-4	.668		424		L8-14
		4	-10	.669		425		L8-15
		-4	-10	.669		426		L8-16
		-4	-4	.667		427		L8-17
		-4	4	.673		428		L8-18
		-4	10	.669		429		L8-19
		0	0	.670		430		L8-20
		0	0	.740		431		L9-1
		-4	0	.740		432		L9-2
		-10	0	.740		433		L9-3
		-20	0	.739		434		L9-4
		4	0	.740		435		L9-5
		10	0	.739		436		L9-6
		20	0	.739		437		L9-7
		0	-4	.739		438		L9-8
		0	-10	.739		439		L9-9
		0	4	.738		440		L9-10
		0	10	.739		441		L9-11
		4	10	.739		442		L9-12
		4	4	.739		443		L9-13
		4	-4	.740		444		L9-14
		4	-10	.740		445		L9-15
		-4	-10	.738		446		L9-16
		-4	-4	.740		447		L9-17
		-4	4	.740		448		L9-18
		-4	10	.738		449		L9-19
		0	0	.740		450		L9-20
		20	0	.739		451		L9-22

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TABLE 4-3 (Continued)
LOW SPEED INDEX
Configuration CC1I1S0B0E2

	M_o	α	β	m/m^*	Data Plotted*	Tabulated Data Page	Tabulated Data Volume	CASE
	0	0	0	.374	1	458	II	L6-1
		0	0	.527		459		L6-4
		0	0	.597		460		L6-5
		0	0	.678		461		L6-8
		0	0	.750		462		L6-9
		0	0	.750		463		L6-10
	.15	0	0	.739		452		L9-21

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TABLE 4-3 (Continued)
LOW SPEED INDEX
Configuration C1I0S0B1E2

	M_o	α	β	m/m^*	Data Plotted*	Tabulated Data Page	Tabulated Data Volume	CASE
	0	0	0	.389	1	259	II	L11-8
				.526		260		L11-5
				.599		261		L11-4
				.678		262		L11-1
				.749		263		L11-9
				.750		264		L11-10
				.739		265		L11-12
				.827		266		L11-11
				.819		267		L11-13
				.813		268		L11-14
				.816		269		L11-15
	.15	0	0	.518		270		L12-1
		-4	0	.518		271		L12-2
		-10	0	.516		272		L12-3
		-20	0	.520		273		L12-4
		4	0	.520		274		L12-5
		10	0	.518		275		L12-6
		20	0	.516		276		L12-7
		0	-4	.517		277		L12-8
		0	-10	.519		278		L12-9
		0	4	.520		279		L12-10
		0	10	.520		280		L12-11
		4	10	.518		281		L12-12
		4	4	.517		282		L12-13
		4	-4	.516		283		L12-14
		4	-10	.509		284		L12-15
		-4	-10	.512		285		L12-16
		-4	-4	.517		286		L12-17
		-4	4	.494		287		L12-18
		-4	10	.519		288		L12-19
		0	0	.519		289		L12-20
		0	0	.667		290		L13-1
		-4	0	.666		291		L13-2
		-10	0	.668		292		L13-3
		-20	0	.670		293		L13-4
		4	0	.669		294		L13-5
		10	0	.669		295		L13-6
		20	0	.668		296		L13-7
		0	-4	.669		297		L13-8

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TABLE 4-3 (Continued)
LOW SPEED INDEX
Configuration C1I0S0B1E2

	M_o	α	β	m/m^*	Data Plotted*	Tabulated Data Page	Tabulated Data Volume	CASE
	.15	0	-10	.666	1	298	II	L13-9
		0	4	.668		299		L13-10
		0	10	.667		300		L13-11
		4	10	.669		301		L13-12
		4	4	.671		302		L13-13
		4	-4	.668		303		L13-14
		4	-10	.668		304		L13-15
		-4	-10	.665		305		L13-16
		-4	-4	.667		306		L13-17
		-4	4	.668		307		L13-18
		-4	10	.669		308		L13-19
		0	0	.669		309		L13-20
		0	0	.741		310		L14-1
		-4	0	.740		311		L14-2
		-10	0	.740		312		L14-3
		-20	0	.741		313		L14-4
		4	0	.742		314		L14-5
		10	0	.741		315		L14-6
		20	0	.746		316		L14-7
		0	-4	.746		317		L14-8
		0	-10	.736		318		L14-9
		0	4	.743		319		L14-10
		0	10	.740		320		L14-11
		4	10	.738		321		L14-12
		4	4	.739		322		L14-13
		4	-4	.741		323		L14-14
		4	-10	.738		324		L14-15
		-4	-10	.740		325		L14-16
		-4	-4	.741		326		L14-17
		-4	+4	.739		327		L14-18
		-4	-10	.740		328		L14-19
		0	0	.738		329		L14-20
		0	0	.739		330		L14-21
		-4	0	.738		331		L14-22
		-10	0	.738		332		L14-23
		-20	0	.740		333		L14-24
		4	0	.740		334		L14-25
		10	0	.739		335		L14-26
		20	0	.741		336		L14-27
		0	-4	.740		337		L14-28

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TABLE 4-3 (Continued)
LOW SPEED INDEX
Configuration C1I0S0B1E2

	M_o	α	β	$^m/_{m^*}$	Data Plotted*	Tabulated Data Page	Tabulated Data Volume	CASE
	.15	0	-10	.739	1	338	II	L14-29
		0	-4	.741		339		L14-30
		0	10	.739		340		L14-31
		0	0	.739		341		L14-32
		0	0	.821		342		L15-1
		-4	0	.817		343		L15-2
		-10	0	.815		344		L15-3
		-20	0	.812		345		L15-4
		4	0	.808		346		L15-5
		10	0	.804		347		L15-6
		20	0	.801		348		L15-7
		0	-4	.793		349		L15-8
		0	-10	.787		350		L15-9
		0	4	.821		351		L15-10
		0	10	.826		352		L15-11
		4	10	.826		353		L15-12
		4	4	.820		354		L15-13
		4	-4	.812		355		L15-14
		0	0	.819		356		L15-15
		0	0	.819		357		L15-16

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TABLE 4-3 (Continued)
LOW SPEED INDEX
Configuration C1I0S0B0E2

	M_o	α	β	$^m/_{m*}$	Data Plotted *	Tabulated Data Page	Tabulated Data Volume	CASE
	0	0	0	.378	1	358	II	L11-7
		0	0	.525	1	359	II	L11-6
		0	0	.600	1	360	II	L11-5
		0	0	.679	1	361	II	L11-2

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TABLE 4-3 (Continued)
LOW SPEED INDEX
Configuration C1I2S2B1E2

	M_o	α	β	$^m/_{m*}$	Data Plotted*	Tabulated Data		CASE
						Page	Volume	
	0	0	0	.379	1	651	II	L1-13
		0	0	.379		652		L1-14
		0	0	.524		653		L1-7
		0	0	.524		654		L1-8
		0	0	.599		655		L1-5
		0	0	.599		656		L1-6
		0	0	.599		657		L1-22
		0	0	.676		658		L1-23
		0	0	.680		659		L1-26
		0	0	.677		660		L1-16
		0	0	.748		661		L1-17
		0	0	.750		662		L1-20
		0	0	.750		663		L1-24
		0	0	.738		664		L1-25
		0	0	.801		665		L1-21
	.15	0	0	.518		666		L2-1
		-4	0	.519		667		L2-2
		-10	0	.518		668		L2-3
		-20	0	.518		669		L2-4
		4	0	.518		670		L2-5
		10	0	.518		671		L2-6
		20	0	.519		672		L2-7
		0	-4	.519		673		L2-8
		0	-10	.519		674		L2-9
		0	4	.518		675		L2-10
		0	10	.518		676		L2-11
		4	10	.518		677		L2-12
		4	-4	.519		678		L2-14
		4	4	.520		679		L2-13
		4	-10	.519		680		L2-15
		4	-10	.520		681		L2-15r
		-4	-10	.517		682		L2-16
		-4	-4	.517		683		L2-17
		-4	-4	.519		684		L2-18
		-4	+4	.518		685		L2-19
		-4	10	.518		686		L2-20
		0	0	.518		687		L2-21
		0	0	.669		688		L3-1
		-4	0	.670		689		L3-2

TABLE 4-3 (Continued)
LOW SPEED INDEX
Configuration C1I2S2B1E2

	M_o	α	β	m/m*	Date Plotted*	Tabulated Data Page	Tabulated Data Volume	CASE
	.15	-10	0	.670	1	690	II	L3-3
		-20	0	.669		691		L3-4
		4	0	.669		692		L3-5
		10	0	.669		693		L3-6
		20	0	.671		694		L3-7
		0	-4	.669		695		L3-8
		0	-10	.668		696		L3-9
		0	4	.670		697		L3-10
		0	10	.669		698		L3-11
		4	10	.668		699		L3-12
		4	4	.668		700		L3-13
		4	-4	.669		701		L3-14
		4	-10	.667		702		L3-15
		-4	-10	.668		703		L3-16
		-4	-4	.668		704		L3-17
		-4	4	.669		705		L3-18
		-4	10	.669		706		L3-19
		0	0	.669		707		L3-20
		0	0	.667		708		L3-21
		0	0	.738		709		L4-1
		-4	0	.744		710		L4-2
		-10	0	.738		711		L4-3
		-20	0	.738		712		L4-4
		4	0	.739		713		L4-5
		10	0	.741		714		L4-6
		20	0	.740		715		L4-7
		0	-4	.740		716		L4-8
		0	-10	.738		717		L4-9
		0	4	.733		718		L4-10
		0	10	.739		719		L4-11
		4	10	.739		720		L4-12
		4	4	.739		721		L4-13
		4	-4	.741		722		L4-14
		4	-10	.740		723		L4-15
		-4	-10	.741		724		L4-16
		-4	-4	.742		725		L4-17
		-4	4	.739		726		L4-18
		-4	10	.739		727		L4-19
		0	0	.740		728		L4-20
		0	0	.739		729		L4-21

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TABLE 4-3 (Continued)
LOW SPEED INDEX
Configuration C1I2S2B1E2

	M_o	α	β	$^m/_{m*}$	Data Plotted*	Tabulated Data Page	Tabulated Data Volume	CASE
	.15	-4	0	.739	1	730	II	L4-22
		-10	0	.740		731		L4-23
		4	0	.739		732		L4-24
		10	0	.738		733		L4-25
		0	-4	.735		734		L4-26
		0	-10	.728		735		L4-27
		0	4	.742		736		L4-28
		0	10	.743		737		L4-29
		0	0	.743		738		L4-30
		0	0	.740		739		L4-31
		0	0	.740		740		L4-33
		-4	0	.737		741		L4-34
		-10	0	.739		742		L4-35
		4	0	.739		743		L4-36
		10	0	.740		744		L4-37
		0	0	.823		745		L5-2
		-4	0	.822		746		L5-3
		-10	0	.815		747		L5-4
		-20	0	.830		748		L5-5
		4	0	.812		749		L5-6
		10	0	.812		750		L5-7
		20	0	.807		751		L5-8
		0	-4	.809		752		L5-9
		0	-10	.804		753		L5-10
		0	4	.819		754		L5-11
		0	10	.814		755		L5-12
		4	10	.824		756		L5-13
		4	4	.819		757		L5-14
		4	-4	.808		758		L5-15
		4	-10	.799		759		L5-16
		-4	-10	.802		760		L5-17
		-4	-4	.813		761		L5-18
		-4	4	.817		762		L5-19
		-4	10	.821		763		L5-20
		0	0	.817		764		L5-21

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TABLE 4-3 (Continued)
LOW SPEED INDEX
Configuration C1I2S2B0E2

	M_o	α	β	$^m/_{m*}$	Data Plotted*	Tabulated Data Page	Tabulated Data Volume	CASE
	0	0	0	.378	1	765	II	L1-11
		0	0	.378		766		L1-12
		0	0	.524		767		L1-9
		0	0	.524		768		L1-10
		0	0	.600		769		L1-3
		0	0	.600		770		L1-4
		0	0	.679		771		L1-1
		0	0	.678		772		L1-2
		0	0	.678		773		L1-15
		0	0	.749		774		L1-18

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TABLE 4-3 (Continued)
LOW SPEED INDEX
Configuration C2I1S1B1E2

	M_o	α	β	m/m*	Data Plotted*	Tabulated Data Page	Tabulated Data Volume	CASE
	.15	0	0	.739	1	775	II	L36-1
		-10	0	.740		776		L36-2
		-20	0	.747		777		L36-3
		10	0	.735		778		L36-4
		20	0	.738		779		L36-5
		0	-10	.738		780		L36-6
		0	10	.745		781		L36-7
		0	0	.831		782		L37-1
		-10	0	.826		783		L37-2
		10	0	.817		784		L37-3
		20	0	.816		785		L37-4

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TABLE 4-3 (Continued)
LOW SPEED INDEX
Configuration C1I1S1B1E1

	M_o	α	β	$m/m*$	Data Plotted*	Tabulated Data Page	Tabulated Data Volume	CASE
	.15	0	0	.668	1	787	II	L25-20
		0	0	.740		788		L17-1
		-4	0	.741		789		L17-2
		-10	0	.739		790		L17-3
		4	0	.739		791		L17-4
		10	0	.740		792		L17-5
		0	-4	.740		793		L17-6
		0	-10	.741		794		L17-7
		0	4	.740		795		L17-8
		0	10	.738		796		L17-9
		4	4	.739		797		L17-10
		4	-4	.741		798		L17-11
		-4	-4	.741		799		L17-12
		-4	4	.739		800		L17-13
		0	0	.740		801		L23-1
		0	0	.739		802		L23-22
		0	0	.817		803		L18-1
		-4	0	.817		804		L18-2
		-10	0	.816		805		L18-3
		4	0	.819		806		L18-4
		10	0	.816		807		L18-5
		0	-4	.817		808		L18-6
		0	-10	.821		809		L18-7
		0	4	.818		810		L18-8
		0	10	.814		811		L18-9
		0	0	.813		812		L24-1

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TABLE 4-3 (Continued)
LOW SPEED INDEX
Configuration C1I0S1B1E1

	M_o	α	β	m/m^*	Data Plotted*	Tabulated Data Page	Tabulated Data Volume	CASE
	.15	0	0	.738	1	813	II	L20-8
		0	0	.812	1	814	II	L21-14

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TABLE 4-3 (Continued)
LOW SPEED INDEX
Configuration C1I2S2B1E1

	M_o	α	β	$^m/_{m^*}$	Data Plotted*	Tabulated Data Page	Tabulated Data Volume	CASE
	.15	0	10	.739	1	827	II	L4-42
		4	0	.740		828		L4-43
		-4	0	.740		829		L4-44
		-4	-4	.742		830		L4-45
		-4	-10	.743		831		L4-46
		-4	4	.741		832		L4-47
		-4	10	.740		833		L4-48
		0	0	.824		834		L5-1
		0	0	.668		817		L3-22
		0	-4	.668		818		L3-23
		0	-10	.668		819		L3-24
		0	4	.666		820		L3-25
		0	10	.666		821		L3-26
		0	0	.740		822		L4-32
		0	0	.743		823		L4-38
		0	-4	.741		824		L4-39
		0	-10	.744		825		L4-40
		0	4	.740		826		L4-41

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TABLE 4-3 (Continued)
LOW SPEED INDEX
Configuration C1I0S0B1E1

	M_o	α	β	m/m^*	Data Plotted*	Tabulated Data Page	Tabulated Data Volume	CASE
	.15	0	0	.740	1	815	II	L14-33
		0	0	.827	1	816	II	L15-17

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TABLE 4-4

Configuration
C1I1S1B1E2

HIGH SPEED WIND TUNNEL RUN INDEX, $0.4 \leq M \leq 0.85$

* Data Plotted:

1 means NR, K and L plotted in Figures 4-1 through 4-36 of Volume I.

2 means p/P_t tubes 101 to 130 plotted in Figures 4-37 through 4-47 of Volume I.

3 means C_p tubes 310 to 344 plotted in Figures 4-48 through 4-81 of Volume I.

	M_o	α	β	$^m/_{m^*}$	Data Plotted*	Tabulated Data Page	Tabulated Data Volume	CASE
	.7	-4	0	.350	1	864	III	H1-8
		-4	0	.782		866		H1-10
		4	0	.880		870		H1-14
		4	0	.325		873		H1-17
		-4	0	.894		867		H1-11
		0	-4	.881		877		H1-21
		4	0	.924		869		H1-13
		4	0	.767		871		H1-15
		-4	0	.925		868		H1-12
		0	4	.880		880		H1-24
		4	0	.583		872		H1-16
		0	4	.923		879		H1-23
		0	-4	.923		878		H1-22
		0	0	.926		859		H1-2
		0	0	.891	1, 2	860		H1-3
		0	0	.339	1	863		H1-7
		-4	0	.597		865		H1-9
		0	-4	.588		875		H1-19
		0	0	.936		886		H2-1
		0	0	.780		861		H1-4
		0	-4	.345		874		H1-18
		0	-4	.774		876		H1-20
		0	0	.593		862		H1-6
	.8	0	0	.816		883		H1-27
		0	0	.373		885		H1-29
		0	0	.912		882		H1-26
		0	0	.914		881		H1-25
		0	0	.624		884		H1-28

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TABLE 4-4 (Continued)
HIGH SPEED INDEX
Configuration C1I0S1B1E2

	M_o	α	β	$^m/_{m^*}$	Data Plotted*	Tabulated Data Page	Volume	CASE
	.4	10	0	.475	1	1045	III	H4-70
		10	0	.556		1046		H4-71
		10	0	.610		1047		H4-72
		0	-4	.628		1048		H4-74
		-4	0	.501		1039		H4-64
		4	0	.573		1043		H4-68
		0	-4	.573		1049		H4-75
		0	-4	.495		1050		H4-76
		4	0	.630		1042		H4-67
		-4	0	.586		1040		H4-65
		4	0	.491		1044		H4-69
		0	4	.492		1051		H4-77
		0	4	.631		1053		H4-79
		-4	0	.645		1041		H4-66
		0	-1	.639		1036		H4-61
		0	4	.574		1052		H4-78
		0	0	.500		1038		H4-63
		0	0	.583	1, 2	1037		H4-62
	.6	5	0	.852	1	957		H3-72
		2	4	.872		945		H3-60
		2	4	.811		946		H3-61
		2	8	.870		947		H3-62
		2	-4	.700		939		H3-54
		10	0	.852		959		H3-74
		10	0	.682		960		H3-75
		10	0	.287		962		H3-77
		2	4	.312		942		H3-57
		2	-4	.811		938		H3-53
		0	0	.312		922		H3-37
		2	8	.529		950		H3-65
		2	-8	.311		952		H3-67
		2	-4	.868		937		H3-52
		9	0	.791		958		H3-73
		2	4	.529		943		H3-58
		2	4	.697		944		H3-59

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TABLE 4-4 (Continued)
HIGH SPEED INDEX
Configuration C1I0S1B1E2

	M_o	α	β	m/m^*	Data Plotted*	Tabulated Data Page	Tabulated Data Volume	CASE
	.6	10	0	.516	1	961	III	H3-76
		2	-4	.534		940		H3-55
		0	0	.533		923		H3-38
		0	0	.815		925		H3-40
		2	8	.316		951		H3-66
		2	8	.694		949		H3-64
		-2	0	.317		931		H3-46
		4	0	.298		932		H3-47
		-2	0	.823		928		H3-45
		2	8	.807		948		H3-63
		2	-8	.690		954		H3-69
		2	-8	.837		956		H3-71
		2	-4	.312		941		H3-56
		-2	0	.881		927		H3-42
		0	0	.706	1, 2	924		H3-39

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TABLE 4-4 (Continued)
HIGH SPEED INDEX
Configuration C1I0S1B1E2

	M_o	α	β	$^m/m^*$	Data Plotted*	Tabulated Data Page	Tabulated Data Volume	CASE
	.6	-1	0	.877	1	926	III	H3-41
		4	0	.697		934		H3-49
		-2	0	.714		929		H3-44
		2	-8	.525		953		H3-68
		-2	0	.540		930		H3-45
		2	-8	.787		955		H3-70
		4	0	.529		933		H3-48
		4	0	.808		935		H3-50
		4	0	.872		936		H3-51
	.7	4	0	.765		899		H3-14
		10	0	.751		965		H3-80
		-4	0	.595		893		H3-8
		-4	0	.350		892		H3-7
		4	0	.582		900		H3-15
		0	8	.912		916		H3-31
		0	-8	.760		919		H3-34
		0	0	.336		891		H3-6
		0	-4	.345		902		H3-17
		0	4	.910		907		H3-22
		0	4	.546		911		H3-26
		0	-4	.588		903		H3-18
		0	-8	.584		920		H3-35
		0	0	.906		887		H3-2
		0	0	.884	1, 2	888		H3-3
		0	0	.775	1	889		H3-4
		-4	0	.783		894		H3-9
		4	0	.335		901		H3-16
		0	0	.590		890		H3-5
		0	8	.763		914		H3-29
		0	4	.770		909		H3-24
		0	4	.881		908		H3-23
		0	8	.341		912		H3-27
		0	-8	.845		918		H3-33
		0	-4	.905		906		H3-21
		0	-8	.888		917		H3-32
		0	-8	.346		921		H3-36
		10	0	.905		967		H3-82
		-4	0	.906		896		H3-11
		4	0	.878		898		H3-13

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TABLE 4-4 (Continued)
HIGH SPEED INDEX
Configuration C1I0S1B1E2

	M_o	α	β	m/m*	Data Plotted*	Tabulated Data Page	Tabulated Data Volume	CASE
	.7	-4	0	.890	1	895	III	H3-10
		10	0	.859		966		H3-81
		0	4	.587		910		H3-25
		10	0	.316		963		H3-78
		10	0	.548		964		H3-79
		0	8	.877		915		H3-30
		0	-4	.881		905		H3-20
		4	0	.905		897		H3-12
		0	8	.584		913		H3-28
		0	-4	.775		904		H3-19
	.8	-4	0	.899	1,3	976		H3-91
		4	0	.718		978		H4-1
		0	4	.796		988		H4-11
		0	0	.365		972		H3-87
		0	0	.614		971		H3-86
		0	-4	.615		984		H4-7
		10	0	.445		983		H4-6
		-4	0	.640		974		H3-89
		0	4	.897		987		H4-10
		4	0	.858		980		H4-3
		0	0	.893		968		H3-83
		0	0	.900		969		H3-84
		0	4	.573		989		H4-12
		10	0	.706		981		H4-4
		4	0	.744		979		H4-2
		10	0	.593		982		H4-5
		-4	0	.369		973		H3-88
		-4	0	.899		977		H3-92
		0	0	.805		970		H3-85
		0	-4	.904		986		H4-9
		-4	0	.826		975		H3-90
		0	-4	.808		985		H4-8
	.85	0	0	.569	1	990		H4-13
		0	4	.820		1004		H4-27
		-4	0	.806		994		H4-17
		0	0	.825		992		H4-15
		0	4	.893		1005		H4-28
		0	0	.736		991		H4-14

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TABLE 4-4 (Continued)
HIGH SPEED INDEX
Configuration C1I0S1B1E2

	M_o	α	β	m/m*	Data Plotted*	Tabulated Data Page	Tabulated Data Volume	CASE
	.85	4	0	.704	1	998	III	H4-21
		0	-4	.896		999		H4-22
		0	4	.623		1003		H4-26
		0	-4	.627		1002		H4-25
		0	-4	.822		1001		H4-24
		4	0	.605		997		H4-20
		-4	0	.616		995		H4-18
		0	-4	.822		1000		H4-23
		4	0	.473		996		H4-19
		-4	0	.874		993		H4-16

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TABLE 4-4 (Continued)
HIGH SPEED INDEX
Configuration C1I2S2B1E2

	M_o	α	β	m/m*	Data Plotted*	Tabulated Data Page	Tabulated Data Volume	CASE
					1		III	
	.4	0	0	.595		1079		H5-14
		0	0	.510		1080		H5-15
		0	0	.385		1081		H5-16
	.6	0	0	.685		1077		H5-12
		0	0	.807		1078		H5-13
		0	0	.526		1076		H5-11
	.7	0	0	.755		1068		H5-2
		0	0	.858		1067		H5-1
		0	0	.592		1069		H5-3
	.8	0	0	.887		1073		H5-8
		0	0	.619		1075		H5-10
		0	0	.797		1074		H5-9

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TABLE 4-4 (Continued)
HIGH SPEED INDEX
Configuration C1I0S1B1E1

	M_o	α	β	$^m/_{m^*}$	Data Plotted*	Tabulated Data Page	Tabulated Data Volume	CASE
	.4	0	4	.657	1	1065	III	H4-92
		0	-4	.602		1063		H4-90
		0	-4	.663		1064		H4-91
		0	-4	.514		1062		H4-89
		0	4	.603		1066		H4-93
		0	0	.516		1056		H4-82
		0	0	.641		1054		H4-80
		0	0	.610		1055		H4-81
		-4	0	.523		1057		H4-83
		-4	0	.610		1058		H4-84
		-4	0	.673		1059		H4-85
		4	0	.663		1060		H4-86
		4	0	.605		1061		H4-87
	.6	4	0	.475		1027		H4-51
		4	0	.673		1028		H4-52
		0	-4	.799		1030		H4-54
		4	0	.791		1029		H4-53
		0	-4	.696		1031		H4-55
		0	0	.514		1021		H4-45
		0	0	.684		1022		H4-46
		0	0	.800		1023		H4-47
		0	4	.677		1034		H4-58
		0	4	.786		1035		H4-59
		0	-4	.523		1032		H4-56
		-4	0	.806		1024		H4-48
		-4	0	.695		1025		H4-49
		-4	0	.527		1026		H4-50
		0	4	.515		1033		H-457
	.7	0	-1	.870		1006		H4-29
		0	-1	.556		1008		H4-31
		0	-4	.764		1016		H4-40
		0	4	.752		1019		H4-43
		0	4	.862		1018		H4-42
		0	-4	.877		1017		H4-41
		-4	-1	.877		1011		H4-34

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TABLE 4-4 (Continued)
HIGH SPEED INDEX
Configuration C1I0S1B1E1

	M_o	α	β	$^m/_{m^*}$	Data Plotted*	Tabulated Data Page	Tabulated Data Volume	CASE
	.7	0	4	.575	1	1020	III	H4-44
		4	0	.852		1012		H4-36
		4	0	.515		1014		H4-38
		0	-4	.548		1015		H4-39
		-4	-1	.772		1010		H4-33
		-4	-1	.586		1009		H4-32
		4	0	.732		1013		H4-37
		0	-1	.767		1007		H4-30

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TABLE 4-4 (Continued)
HIGH SPEED INDEX
Configuration C1I2S2B1E1

	M_o	α	β	$^m/_{m^*}$	Data Plotted*	Tabulated Data Page	Volume	CASE
	.7	0	0	.730	1	1071	III	H5-5
		0	0	.569	↓	1070	↓	H5-4
		0	0	.826	↓	1072	↓	H5-6

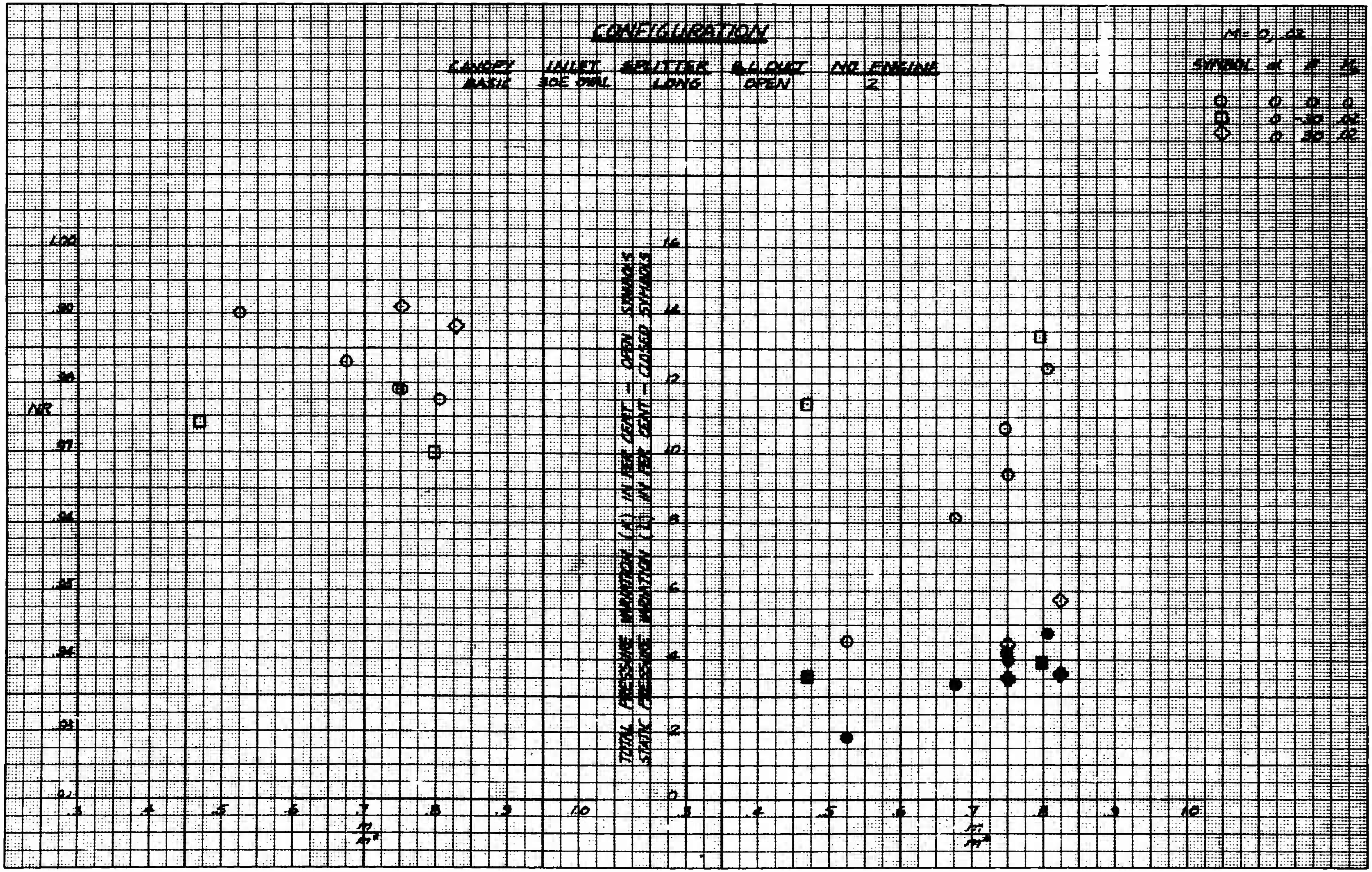

Figure 4-1 Total Pressure Recovery (NR), and Maximum Total (K) and Static (L) Pressure Variation vs Mass Flow Ratio (m/m*); Configuration C1I1S1B1E2; Mach No. 0 and .02

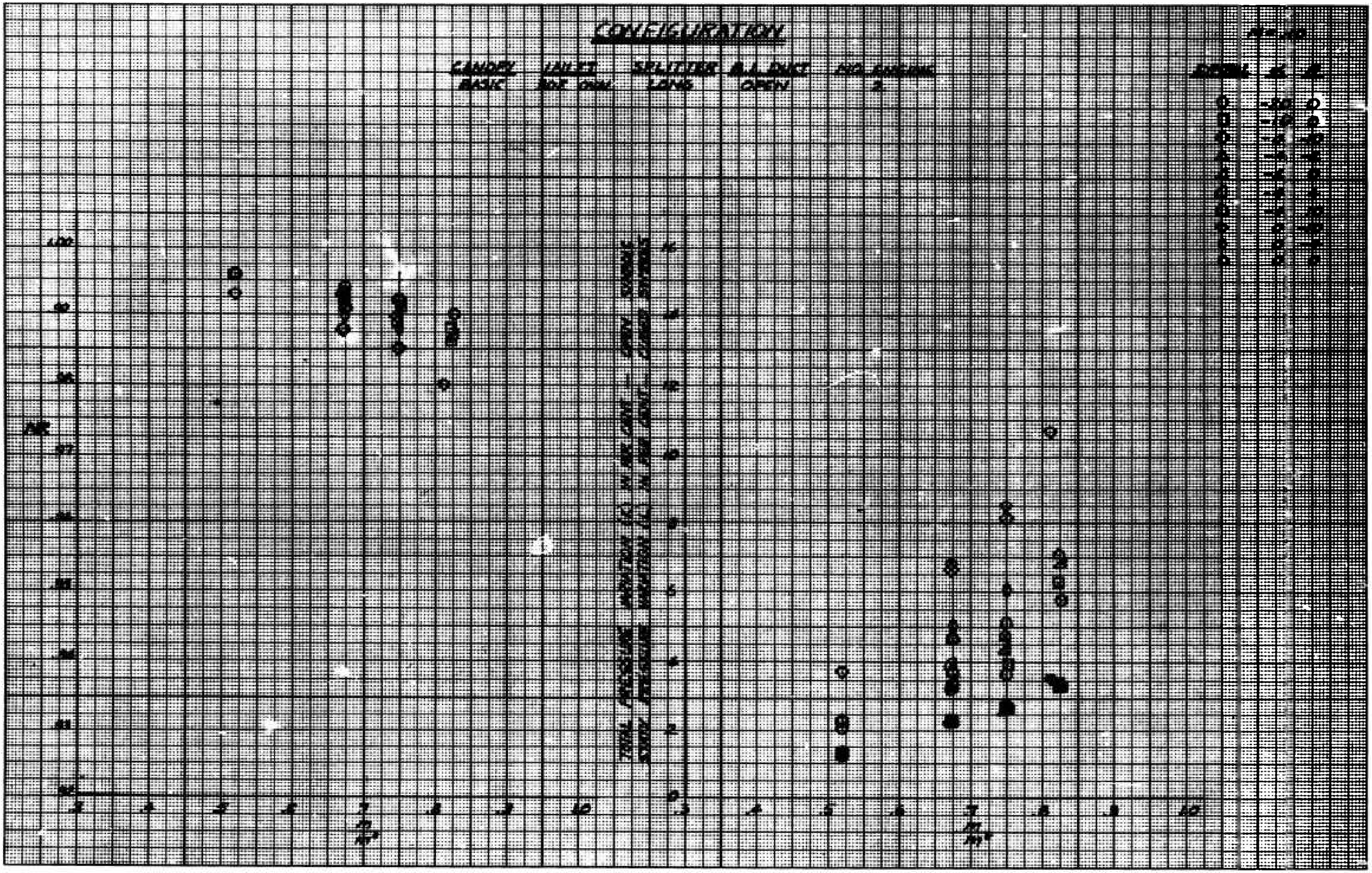

Figure 4-2a Total Pressure Recovery (NR), and Maximum Total (K) and Static (L) Pressure Variation vs Mass Flow Ratio (m/m*); Configuration C1I1S1B1E2; Mach No. .10

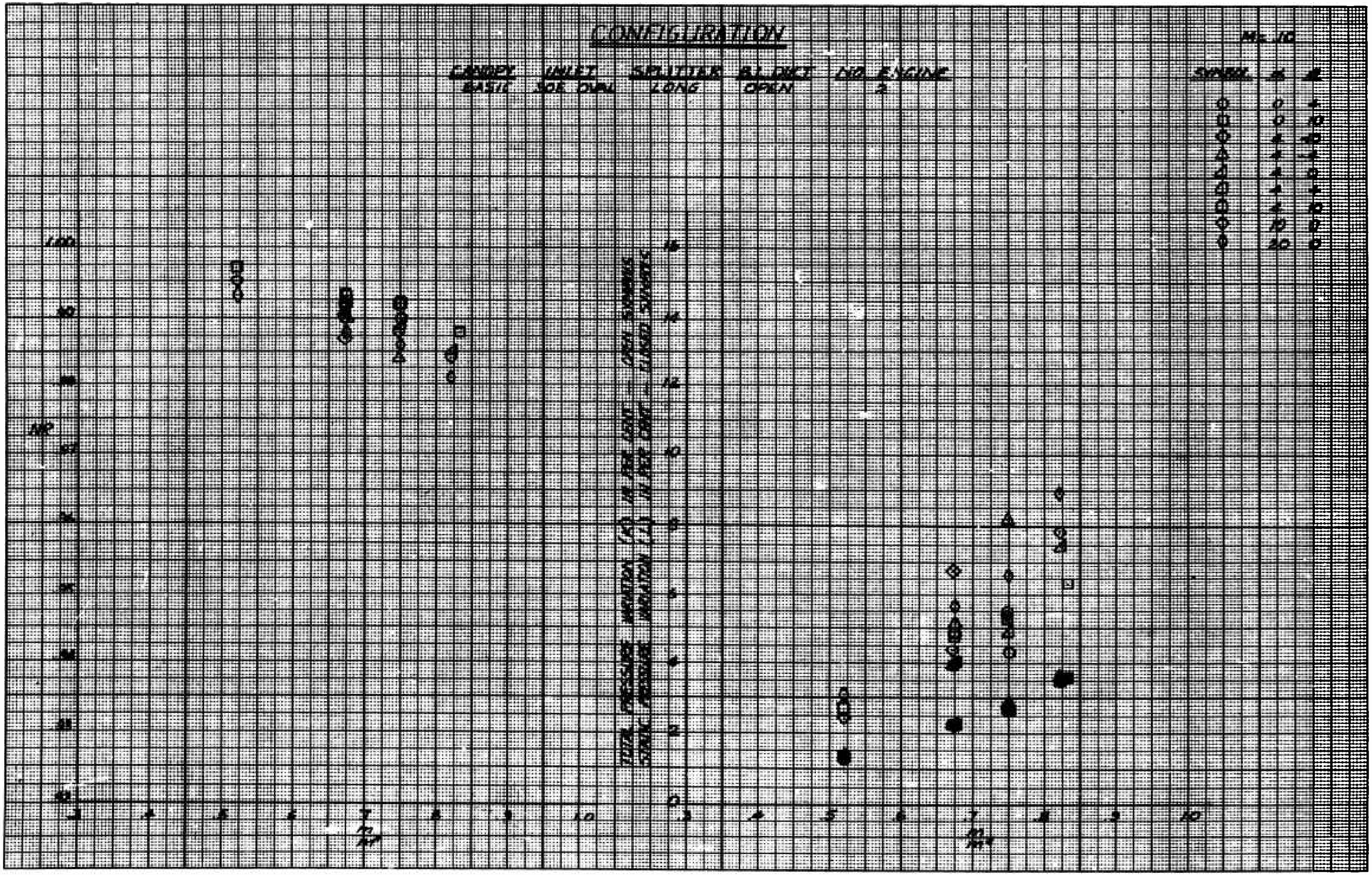

Figure 4-2b Total Pressure Recovery (NR). and Maximum Total (K) and Static (L) Pressure Variation vs Mass Flow Ratio (m/m*); Configuration C1I1S1B1E2; Mach No. .10

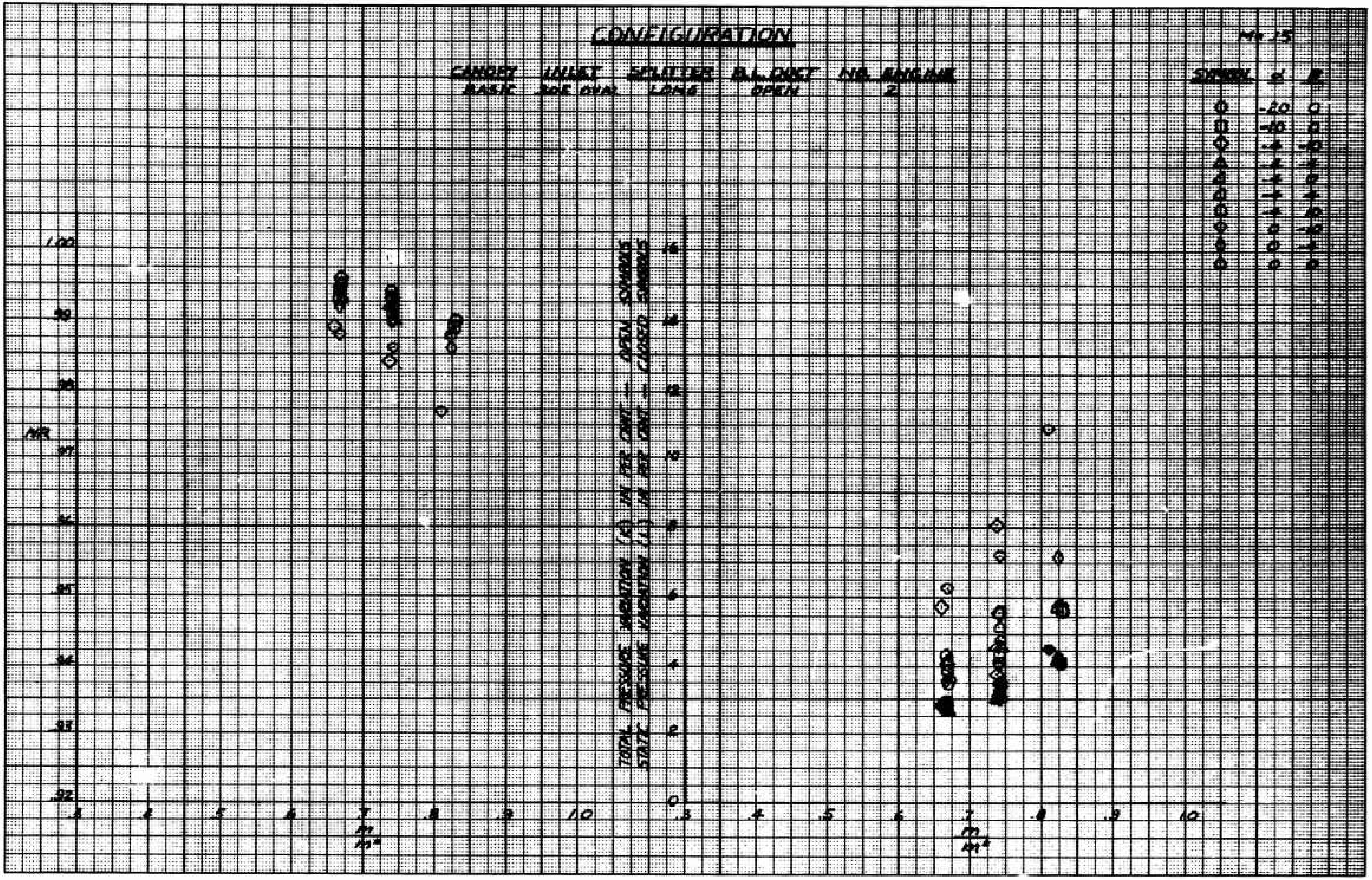

Figure 4-3a Total Pressure Recovery (NR), and Maximum Total (K) and Static (L) Pressure Variation vs Mass Flow Ratio (m/m*); Configuration C1I1S1B1E2; Mach No. .15

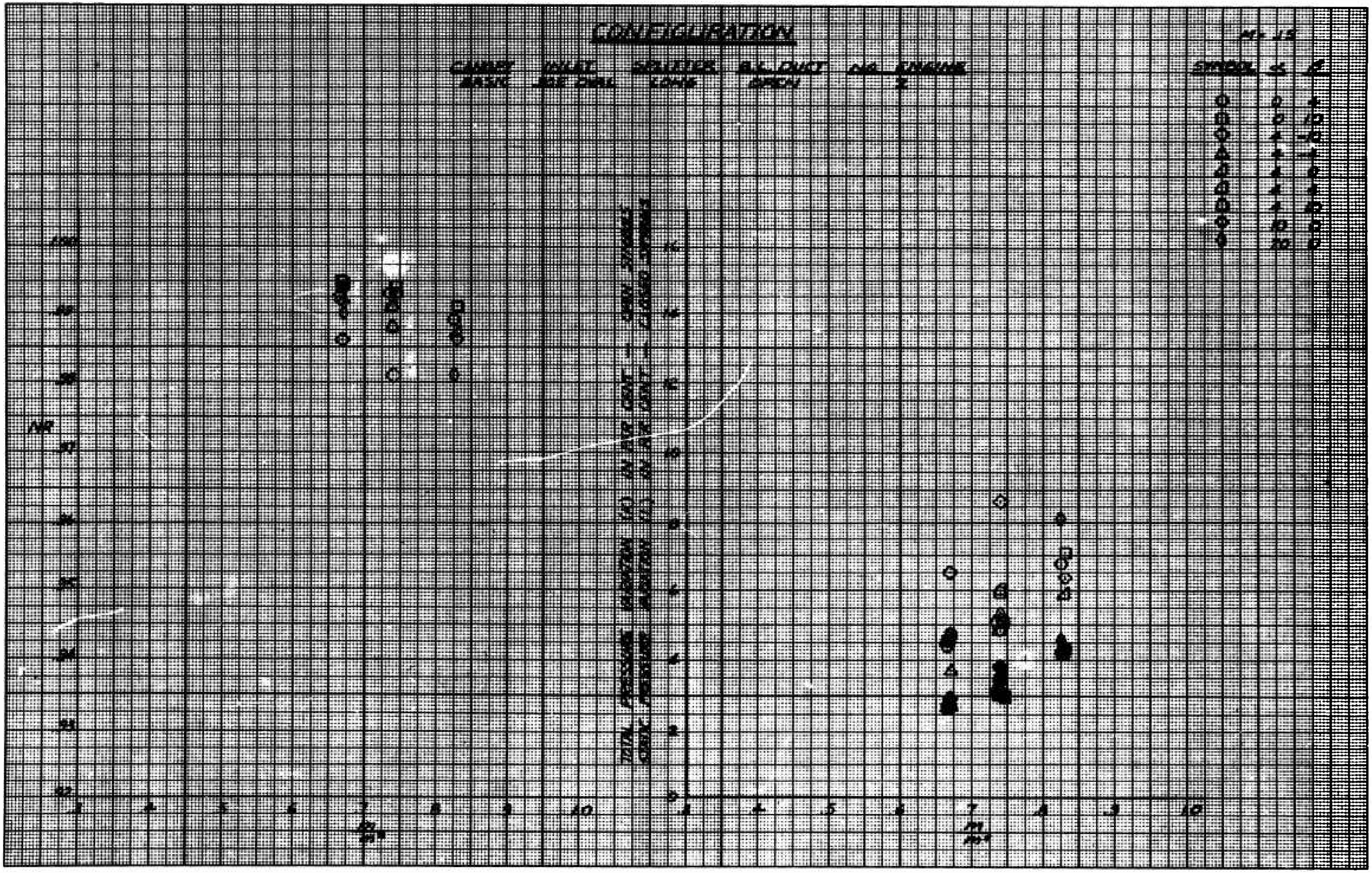

Figure 4-3b Total Pressure Recovery (NR), and Maximum Total (K) and Static (L) Pressure Variation vs Mass Flow Ratio (m/m*); Configuration C1I1S1B1E2; Mach No. .15

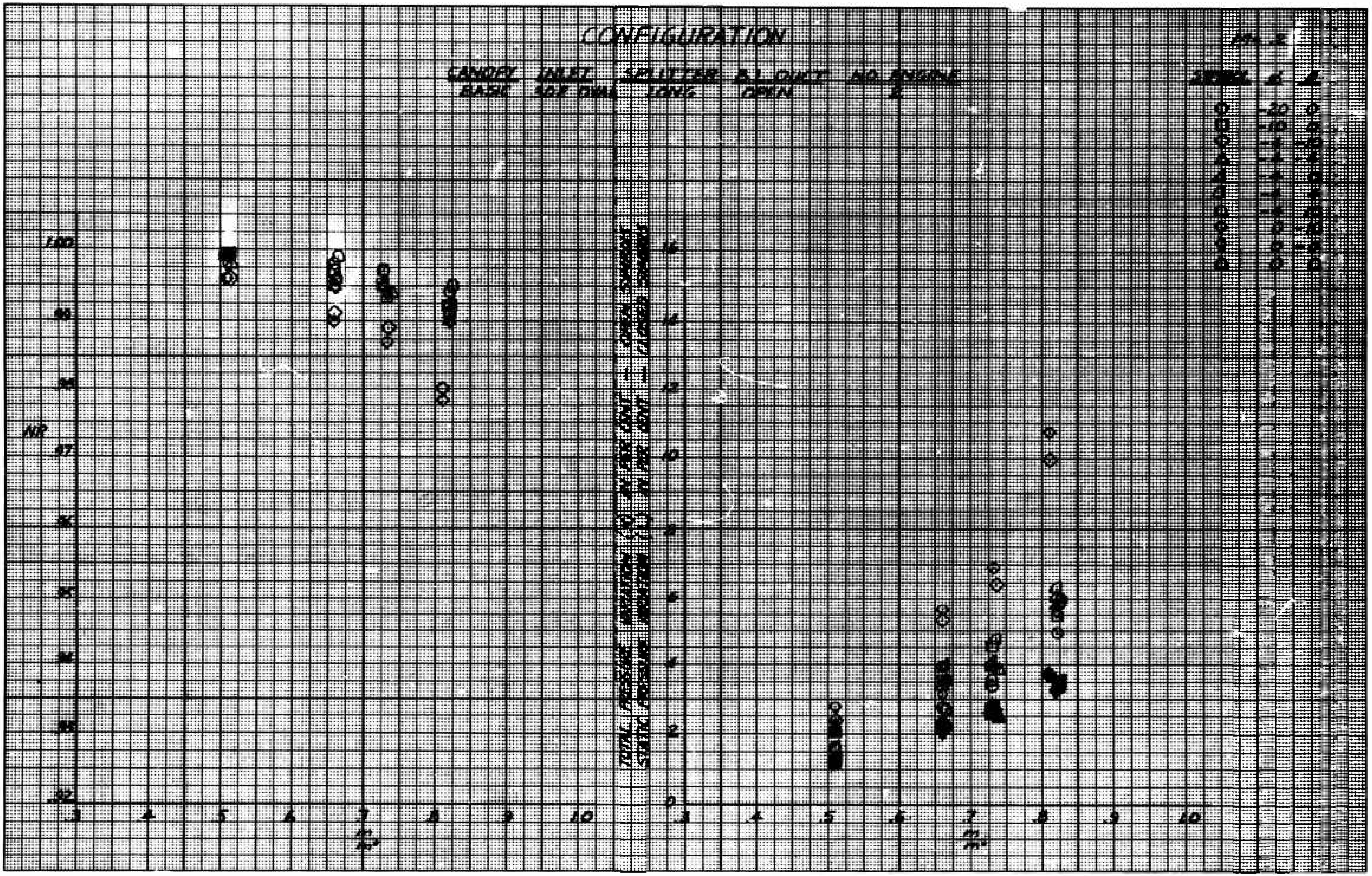

Figure 4-4a Total Pressure Recovery (NR), and Maximum Total (K) and Static (L) Pressure Variation vs Mass Flow Ratio (m/m*); Configuration C1I1S1B1E2; Mach No. .2

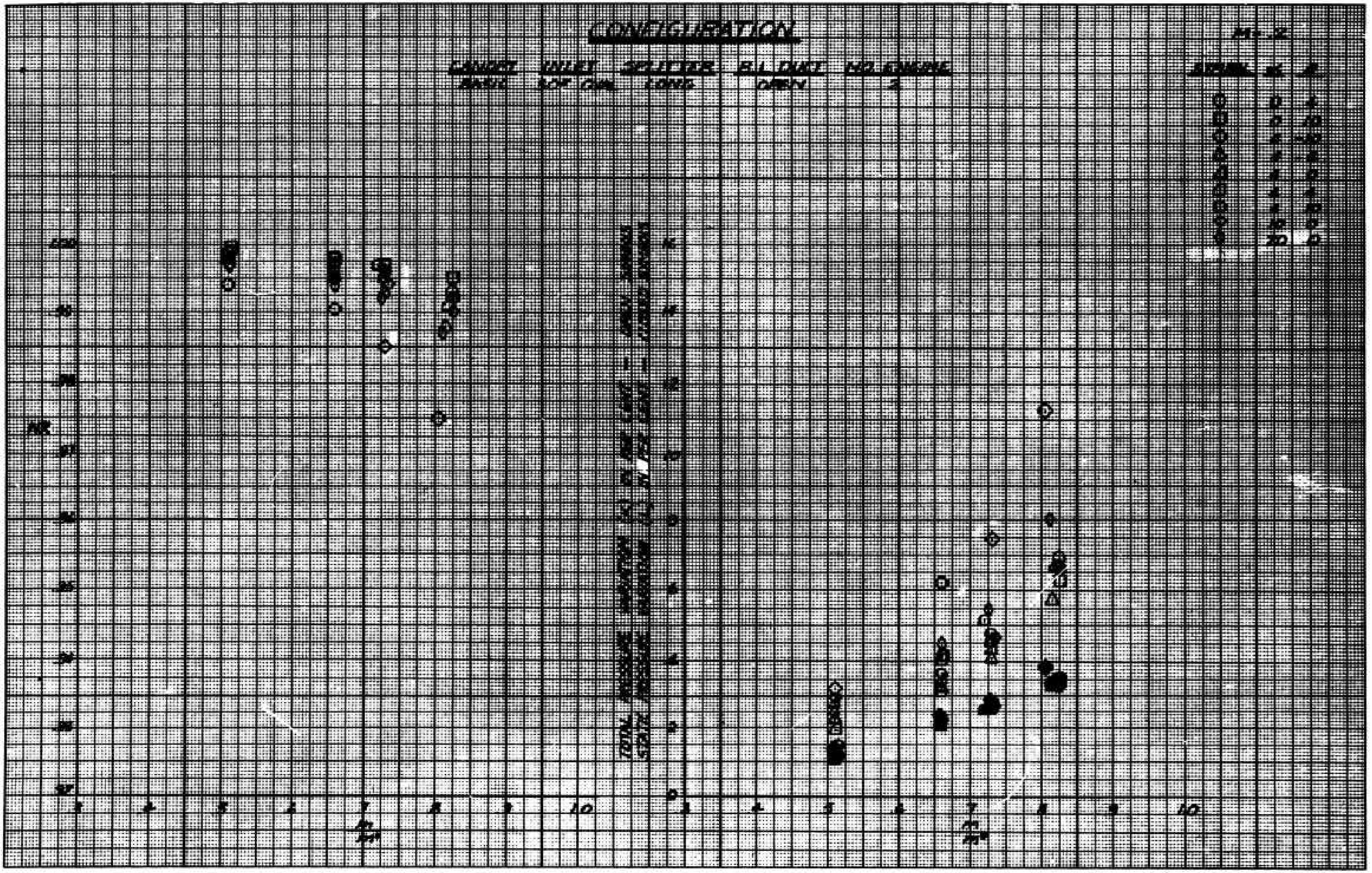

Figure 4-4b Total Pressure Recovery (NR), and Maximum Total (K) and Static (L) Pressure Variation vs Mass Flow Ratio (m/m*); Configuration C1I1S1B1E2; Mach No. .2

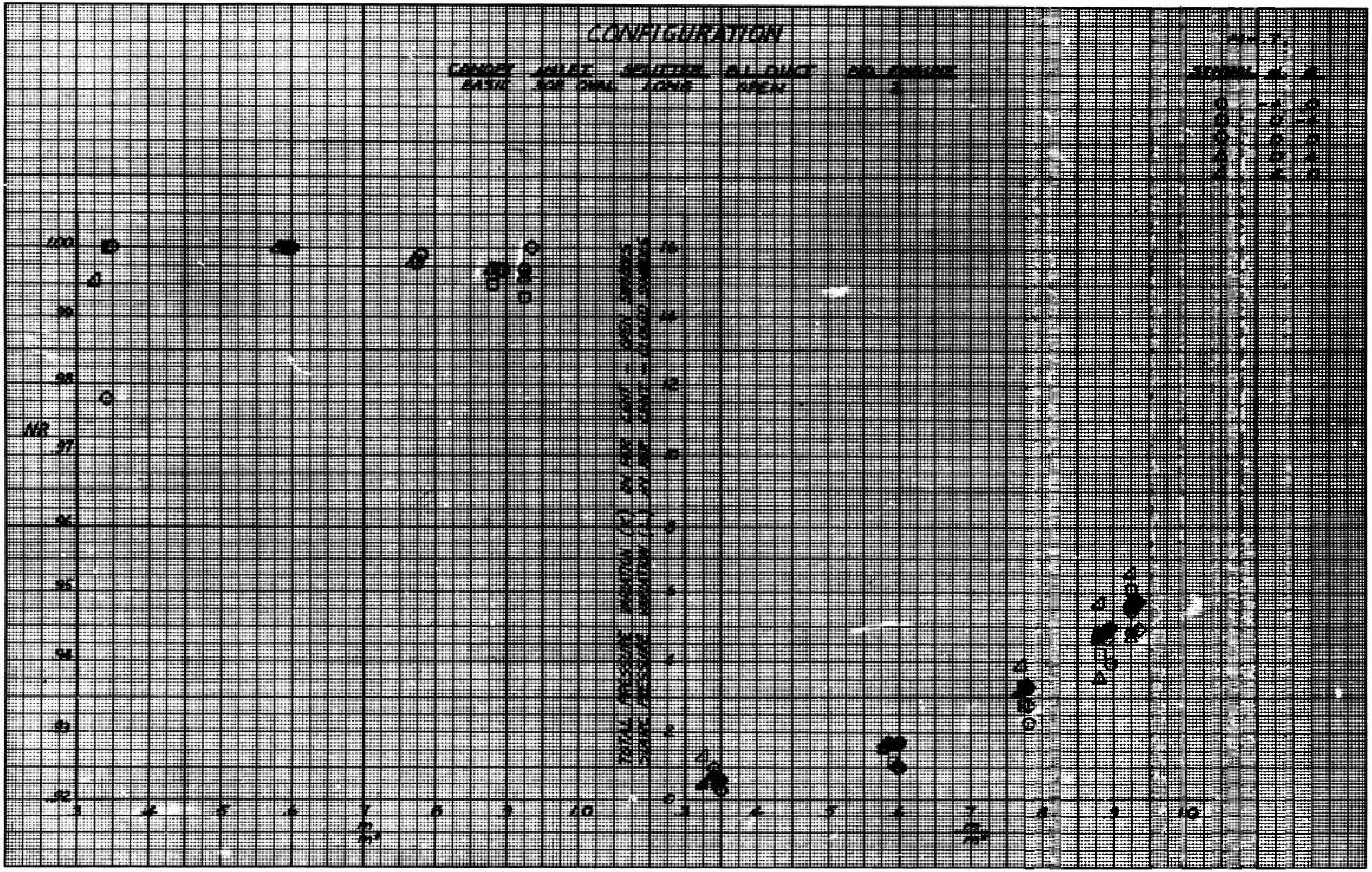

Figure 4-5 Total Pressure Recovery (NR), and Maximum Total (K) and Static (L) Pressure Variation vs Mass Flow Ratio (m/m*); Configuration C1I1S1B1E2; Mach No. .7

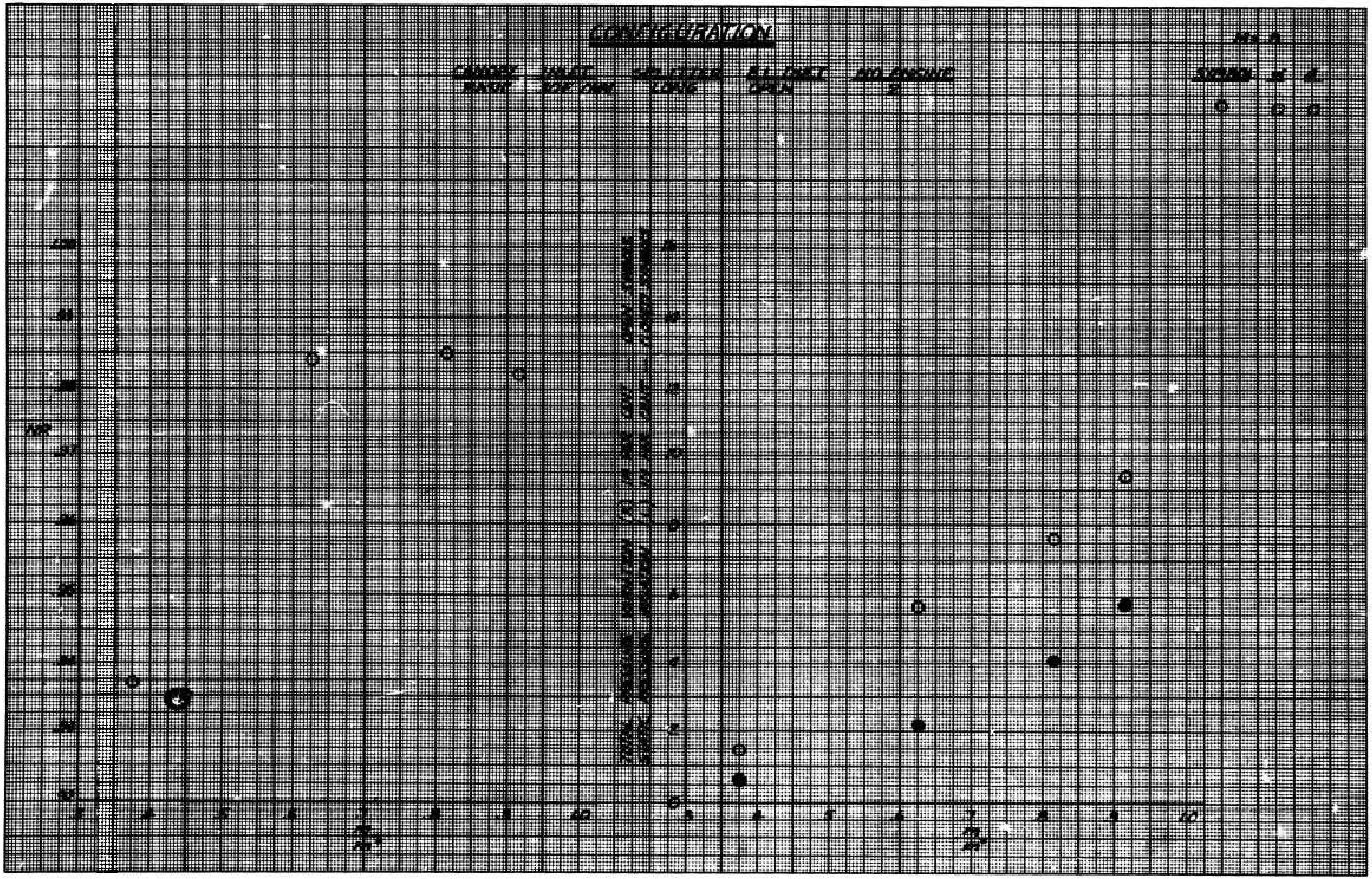

Figure 4-6 Total Pressure Recovery (NR), and Maximum Total (K) and Static (L) Pressure Variation vs Mass Flow Ratio (m/m^*); Configuration C1H1S1B1E2; Mach No. .8

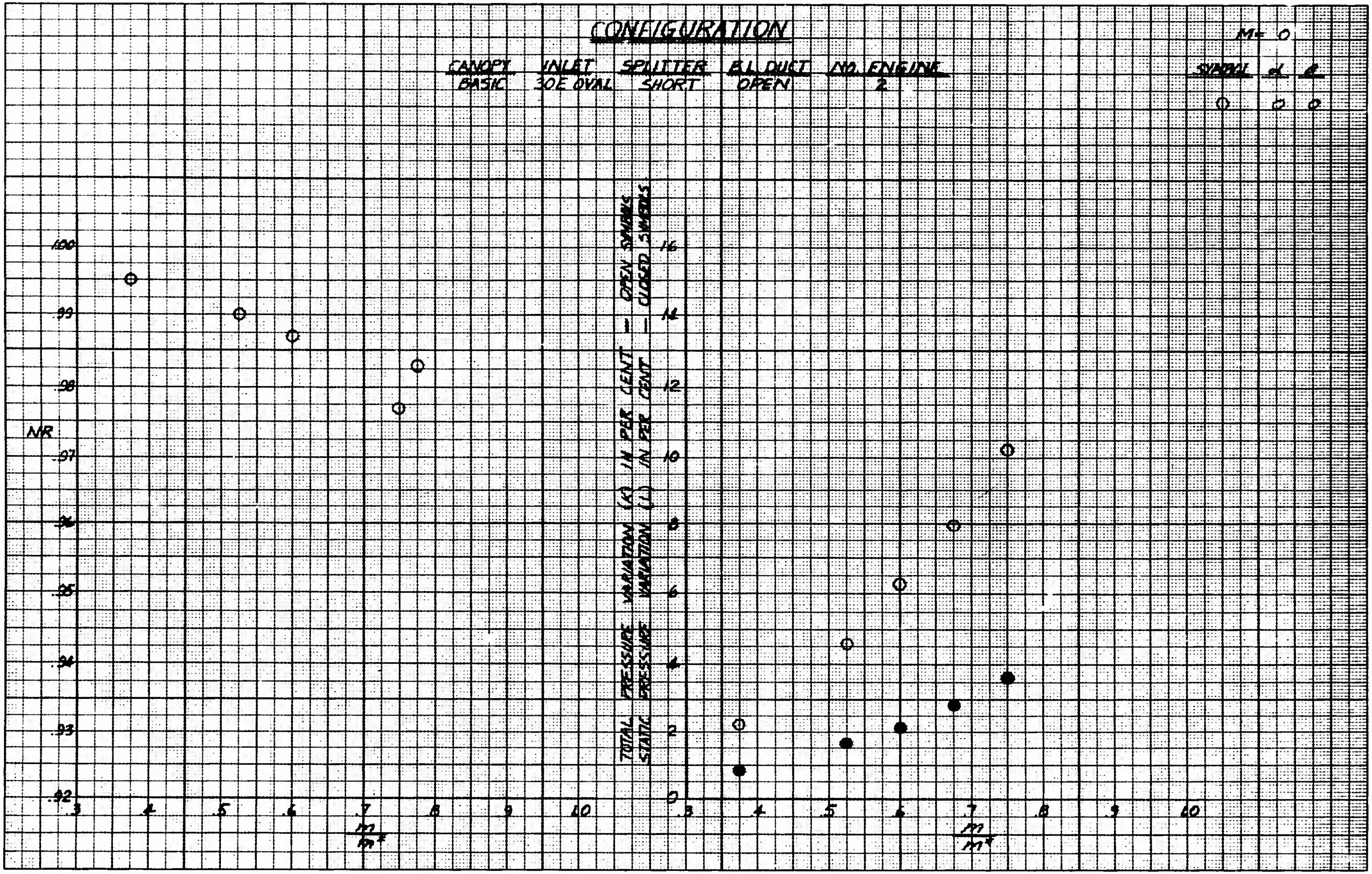

Figure 4-7 Total Pressure Recovery (NR), and Maximum Total (K) and Static (L) Pressure Variation vs Mass Flow Ratio (m/m*); Configuration C1I1S0B1E2; Mach No. 0

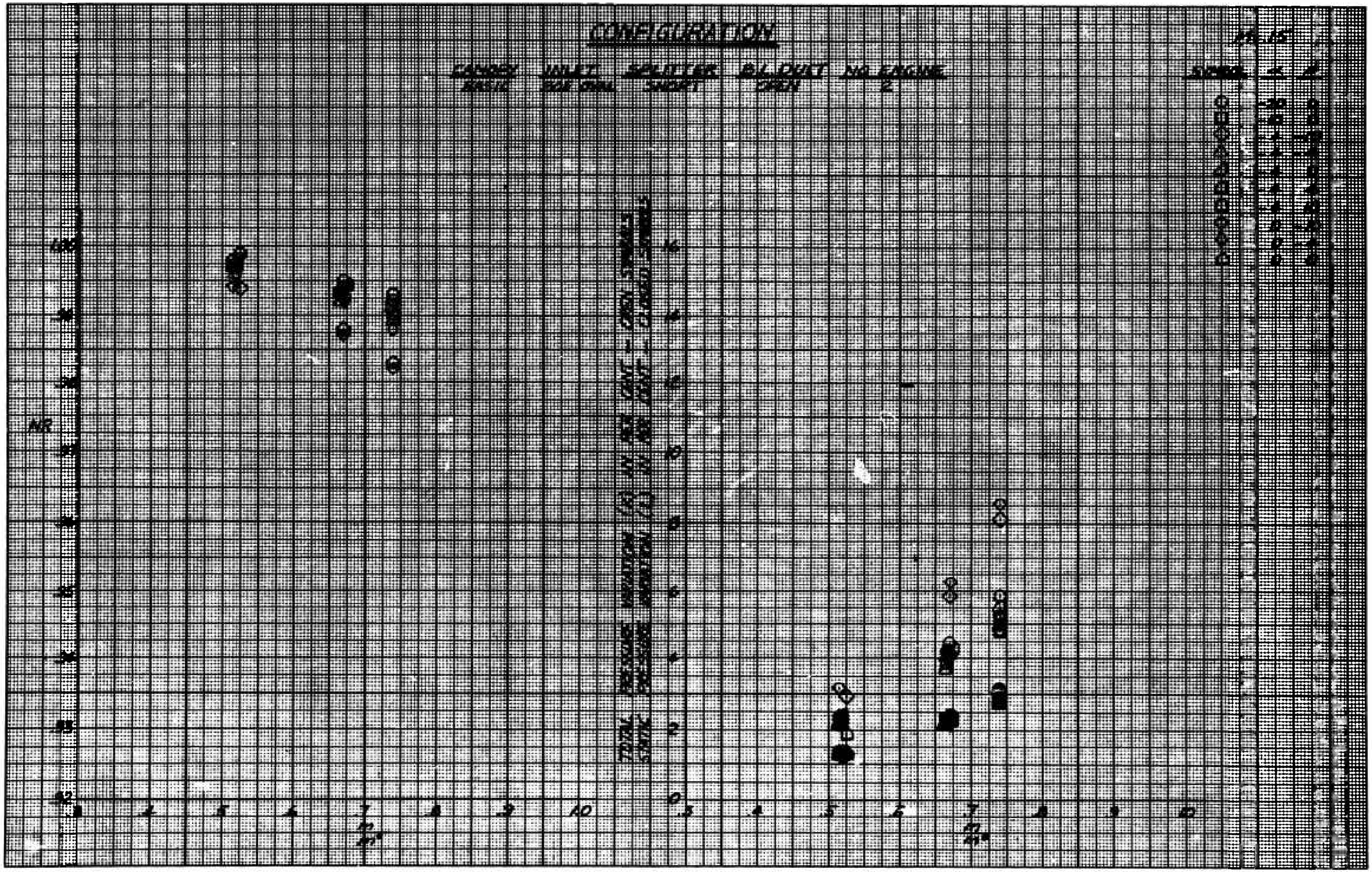

Figure 4-8a Total Pressure Recovery (NR); and Maximum Total (K) and Static (L) Pressure Variation vs Mass Flow Ratio (m/m*); Configuration C1I1S0B1E2; Mach No. .15

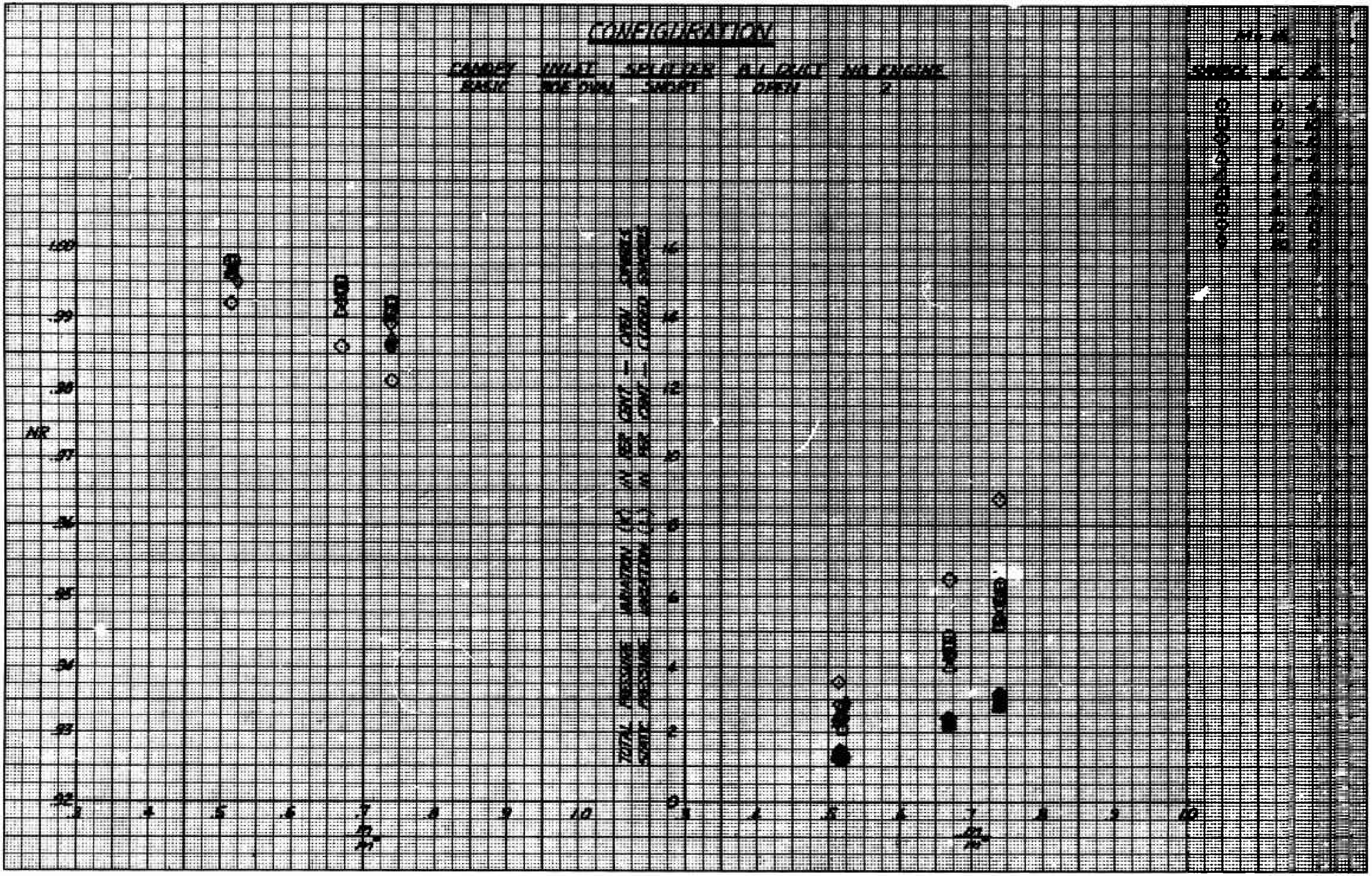

Figure 4-8b Total Pressure Recovery (NR), and Maximum Total (K) and Static (L) Pressure Variation vs Mass Flow Ratio (m/m*); Configuration C1I1S0B1E2; Mach No. .15

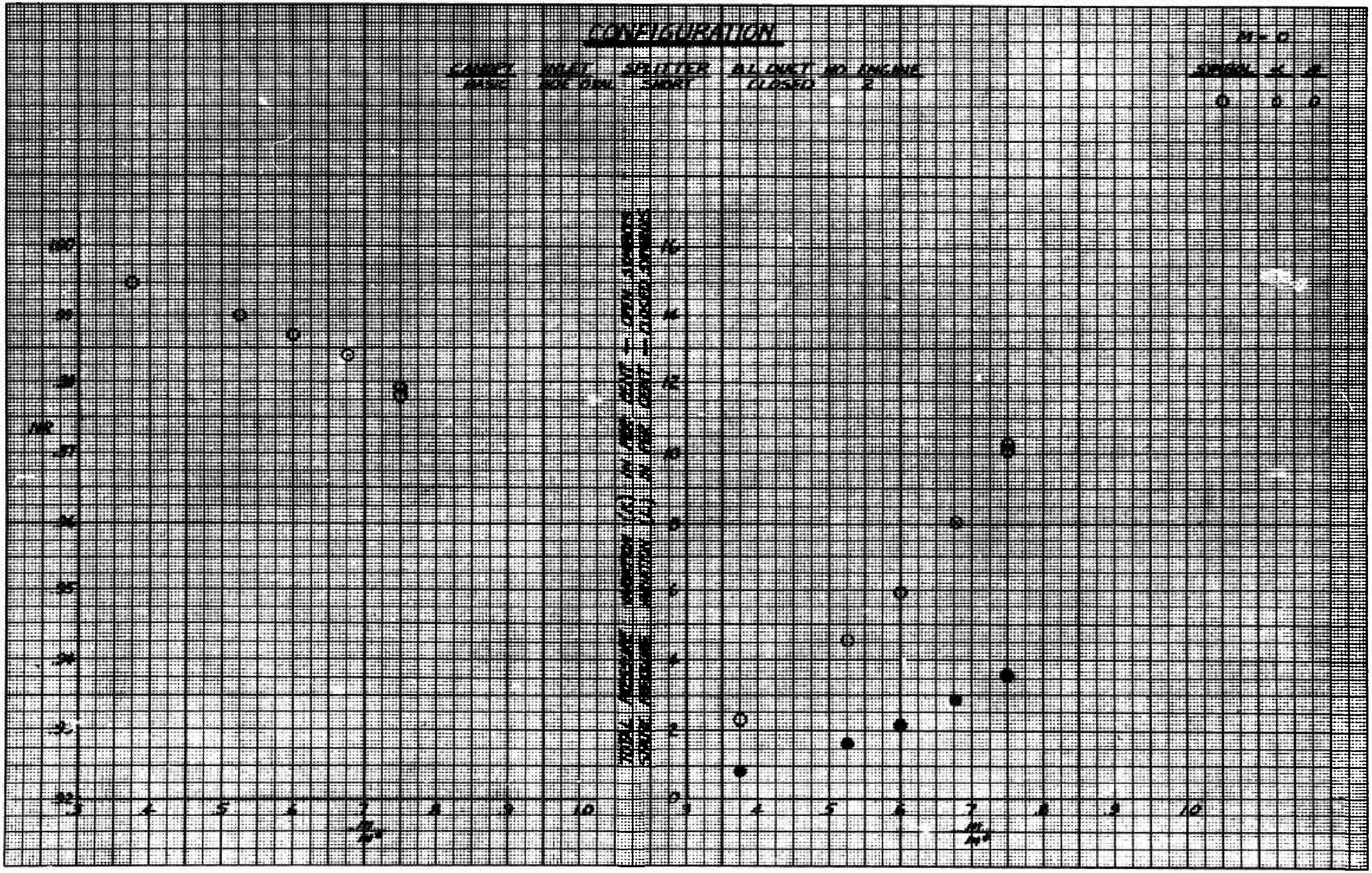

Figure 4-9 Total Pressure Recovery (NR), and Maximum Total (K) and Static (L) Pressure Variation vs Mass Flow Ratio (m/m*); Configuration C1I1S0B0E2; Mach No. 0

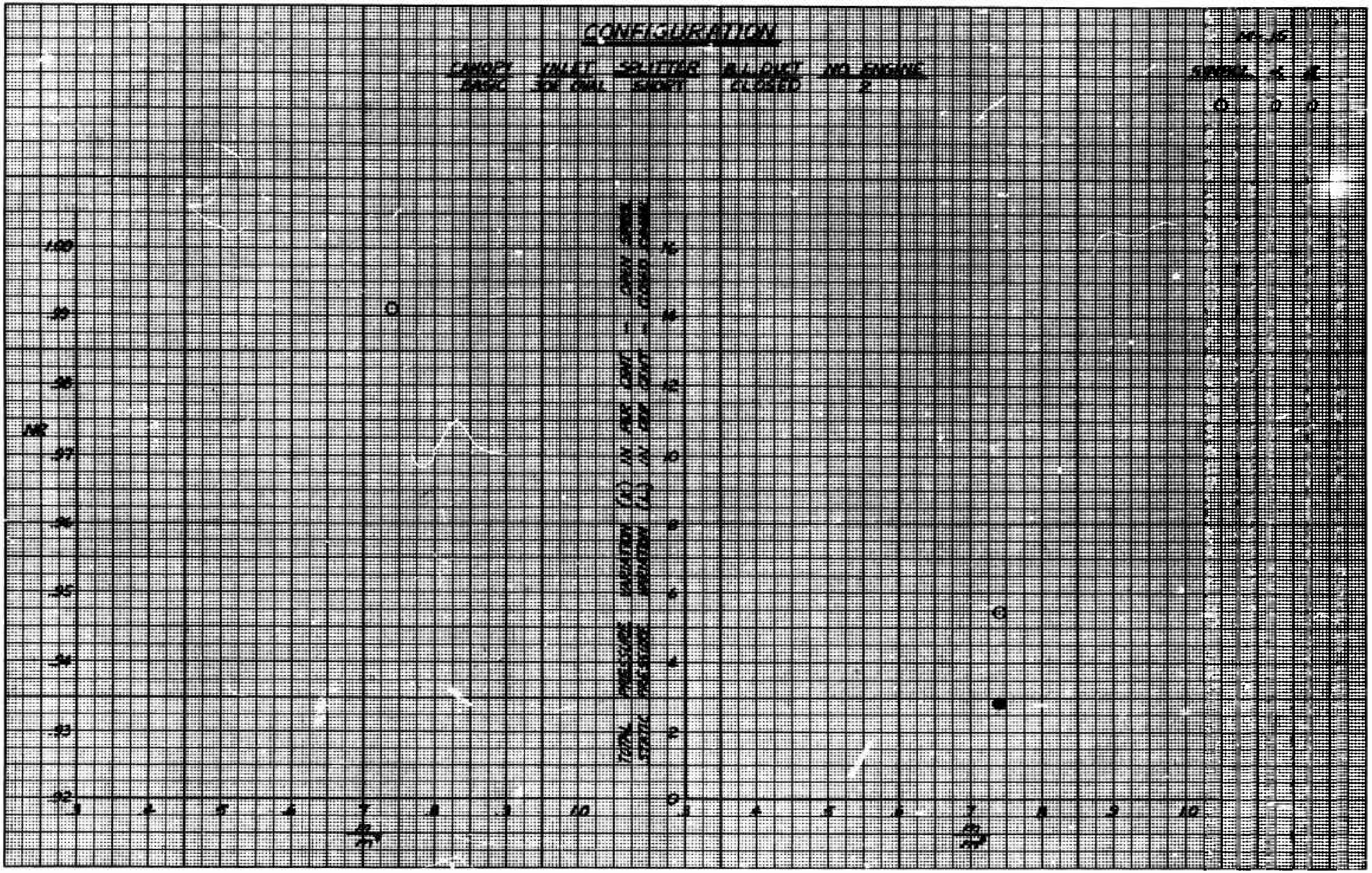

Figure 4-10 Total Pressure Recovery (NR), and Maximum Total (K) and Static (L) Pressure Variation vs Mass Flow Ratio (m/m*); Configuration C1I1S0B0E2; Mach No. .15

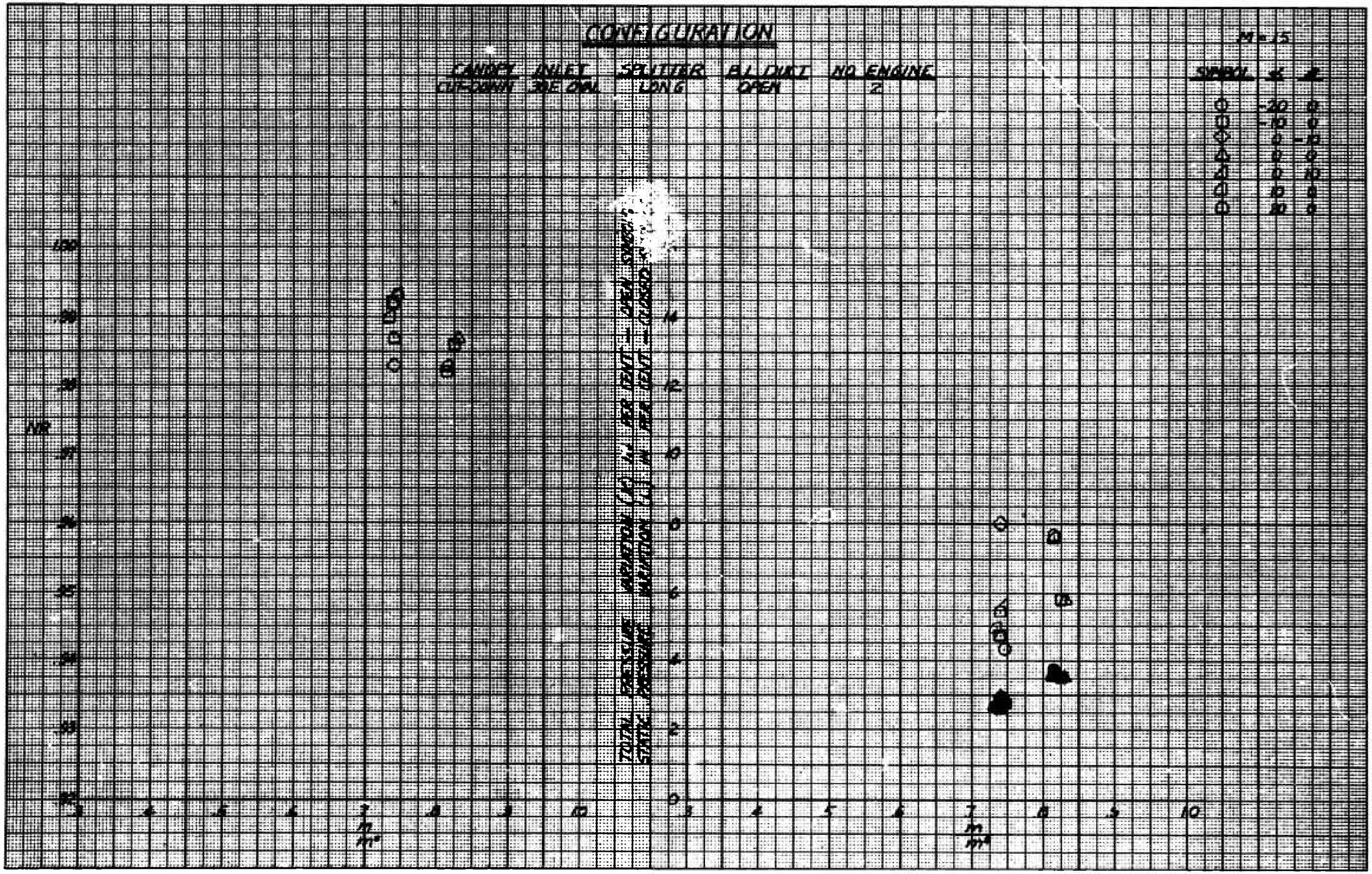

Figure 4-11 Total Pressure Recovery (NR), and Maximum Total (K) and Static (L) Pressure Variation vs Mass Flow Ratio (m/m*); Configuration C2I1S1B1E2; Mach No. .15

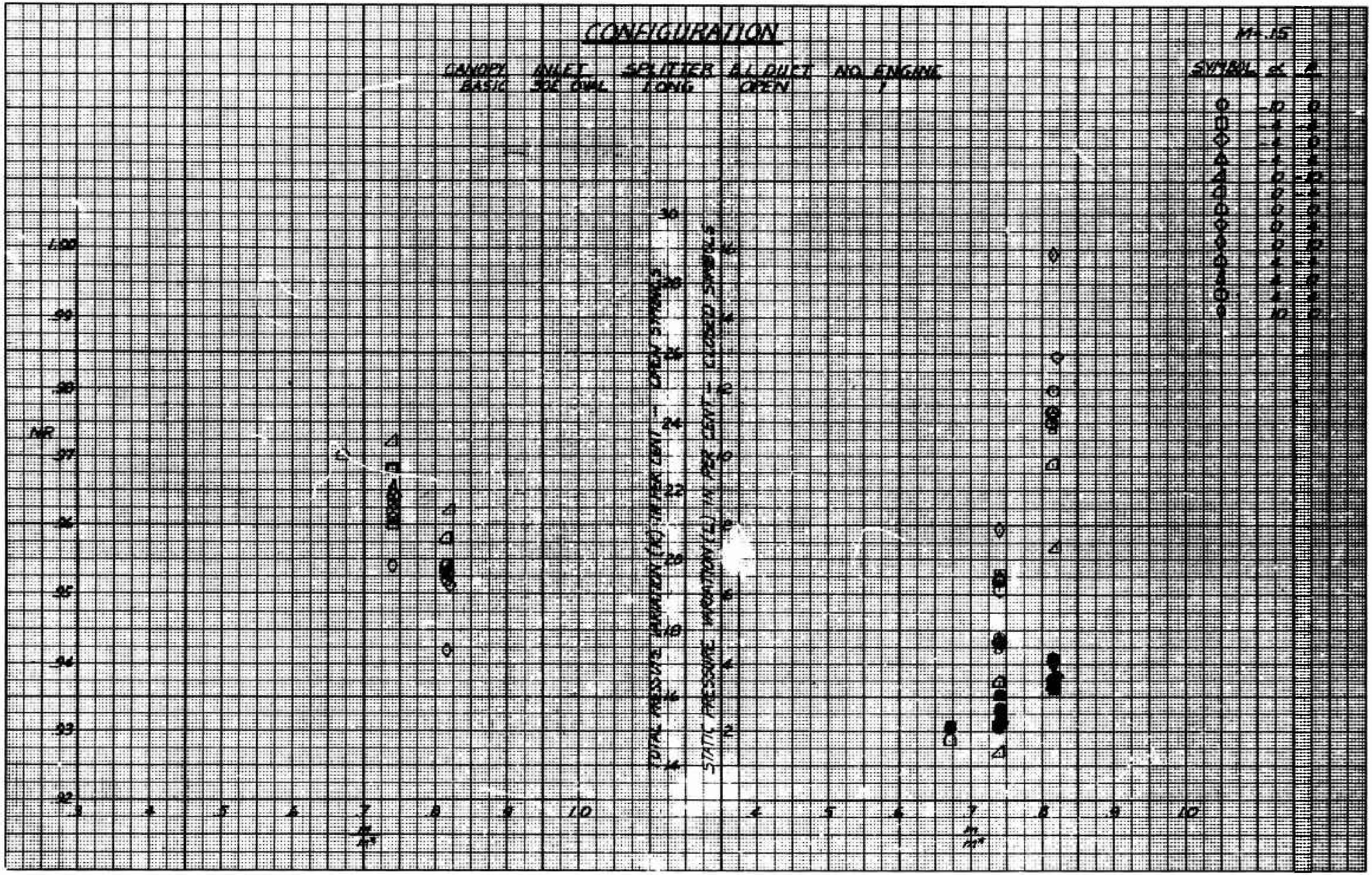

Figure 4-12 Total Pressure Recovery (NR), and Maximum Total (K) and Static (L) Pressure Variation vs Mass Flow Ratio (m/m*); Configuration C1I1S1B1E1; Mach No. .15

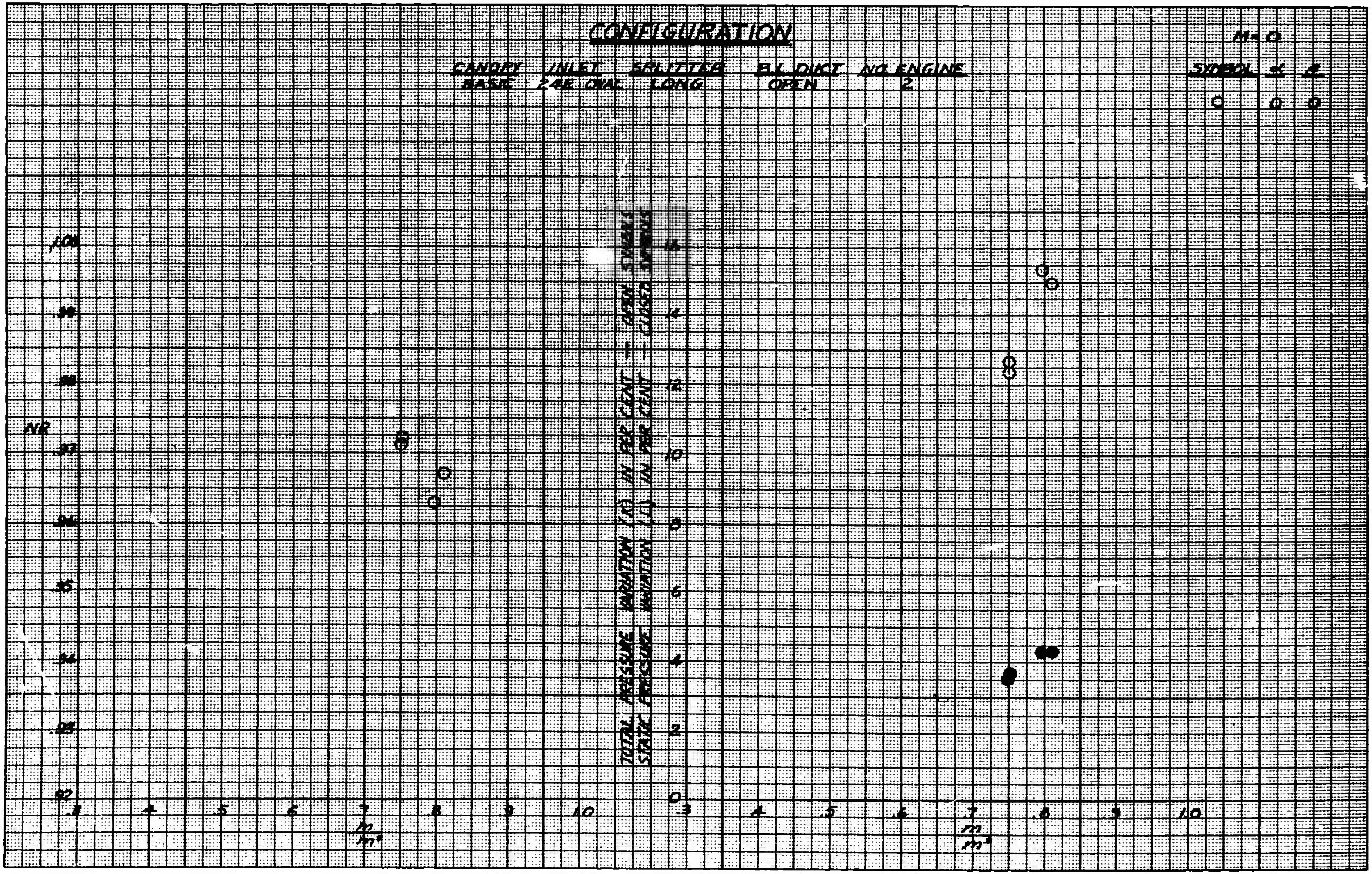

Figure 4-13 Total Pressure Recovery (NR), and Maximum Total (K) and Static (L) Pressure Variation vs Mass Flow Ratio (m/m*); Configuration C1I0S1B1E2; Mach No. 0

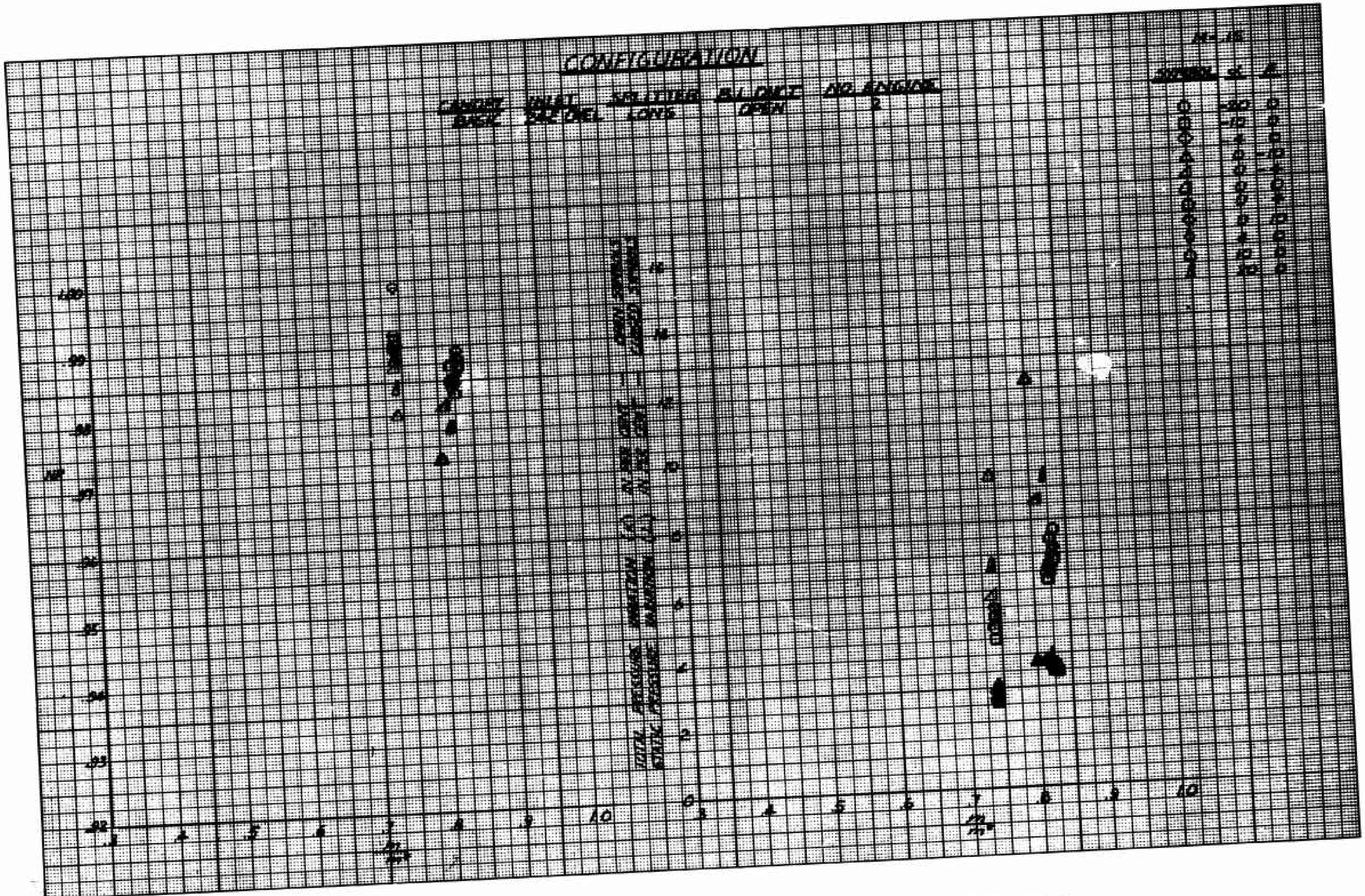

Figure 4-14 Total Pressure Recovery (NR), and Maximum Total (K) and Static (L) Pressure Variation vs Mass Flow Ratio (m/m*); Configuration C1I0S1B1E2; Mach No. .15

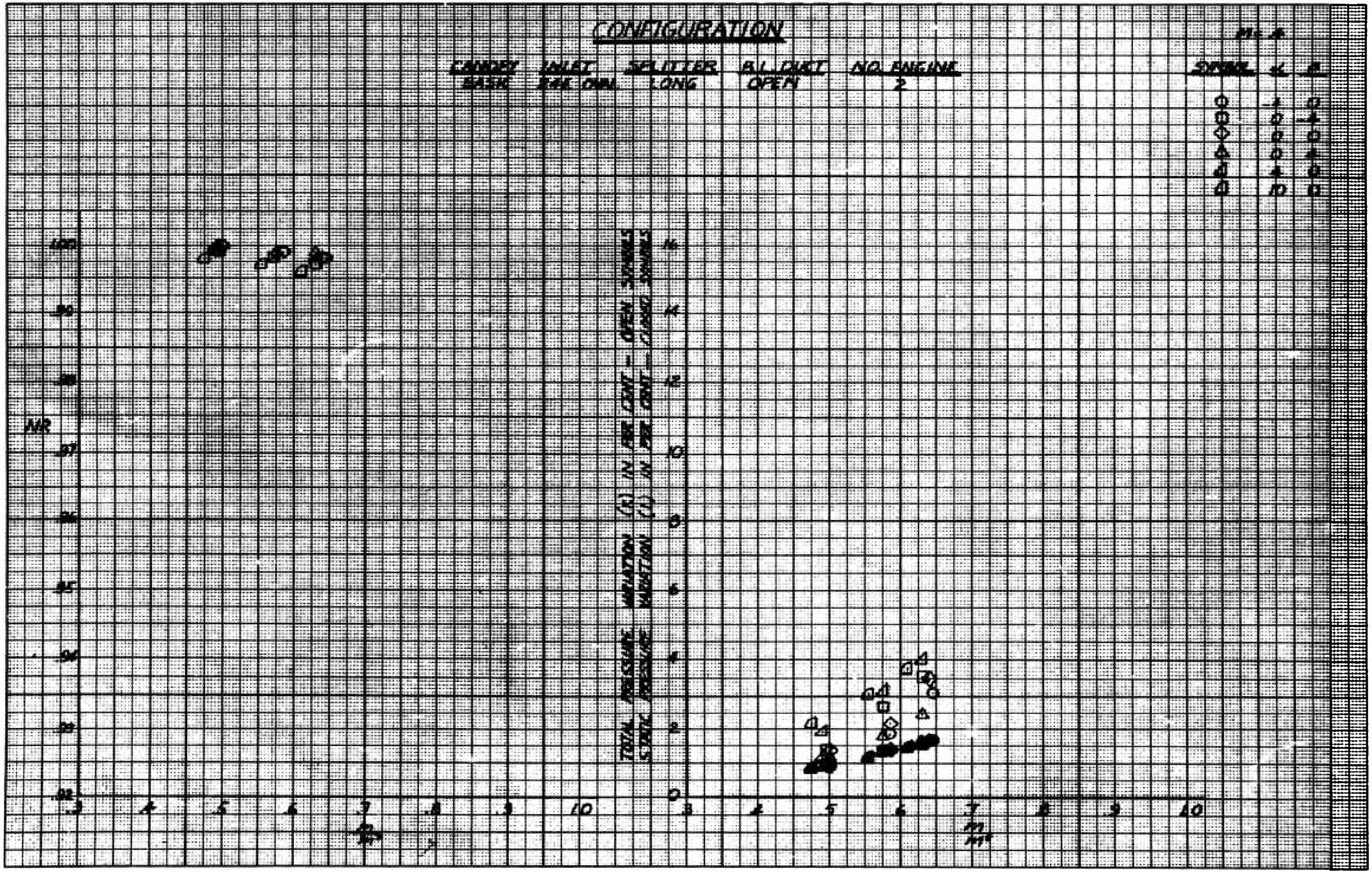

Figure 4-15 Total Pressure Recovery (N R), and Maximum Total (K) and Static (L) Pressure Variation vs Mass Flow Ratio (m/m*); Configuration C1I0S1B1F2; Mach No. .4

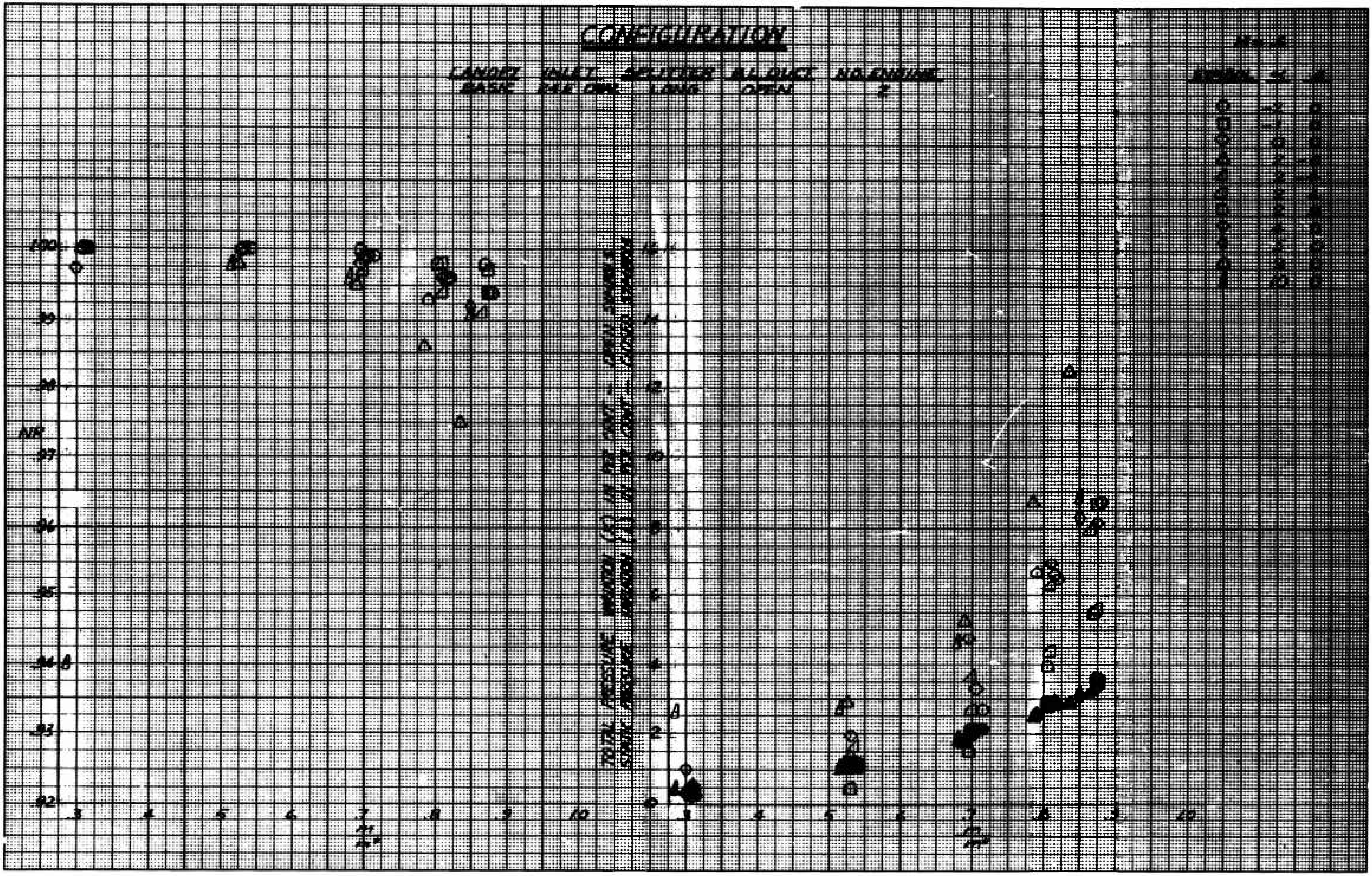

Figure 4-16 Total Pressure Recovery (NR), and Maximum Total (K) and Static (L) Pressure Variation vs Mass Flow Ratio (m/m*); Configuration C1I0S1B1E2; Mach No. .6

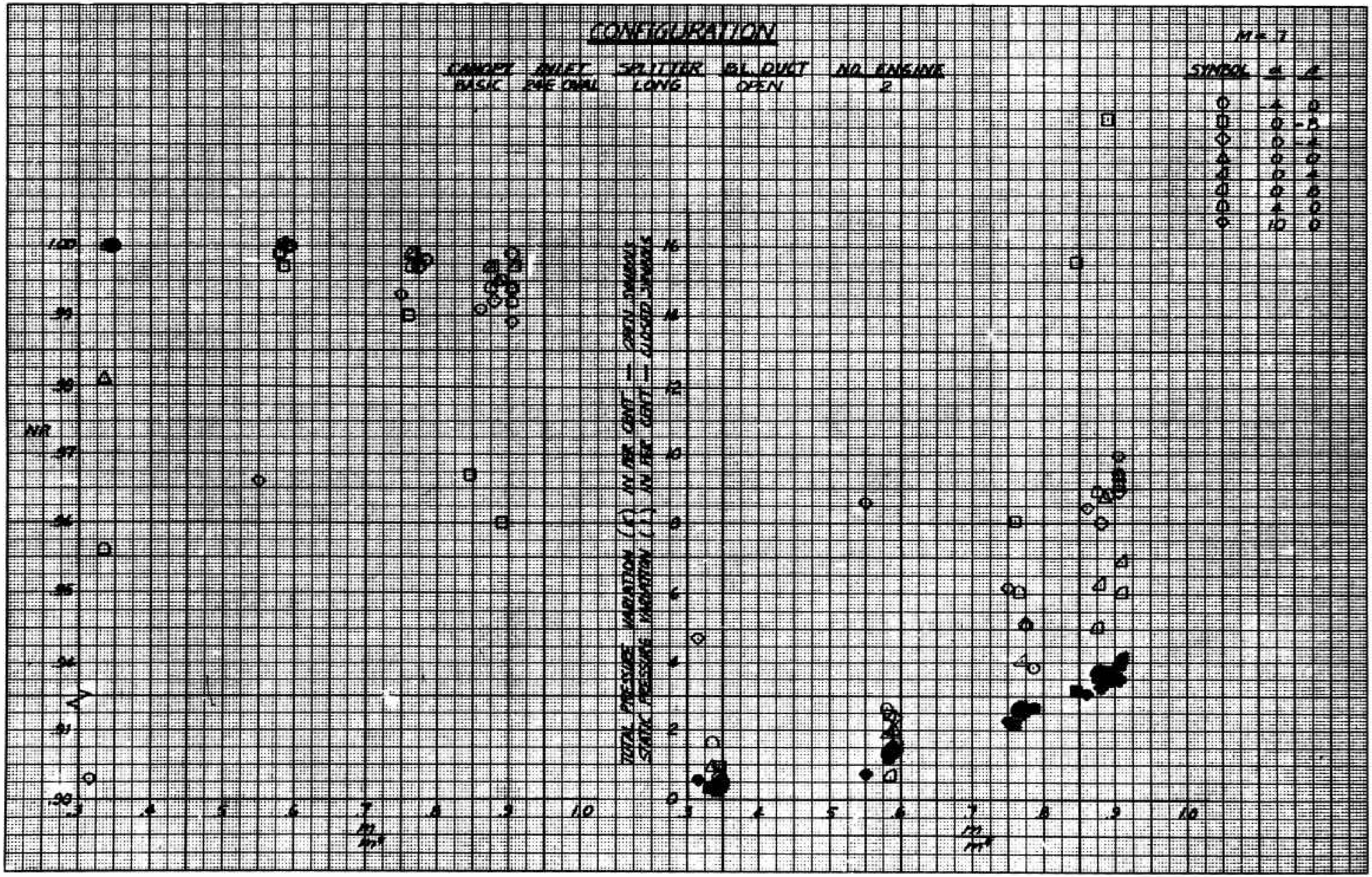

Figure 4-17 Total Pressure Recovery (NR), and Maximum Total (K) and Static (L) Pressure Variation vs Mass Flow Ratio (m/m*); Configuration C1I0S1B1E2; Mach No. .7

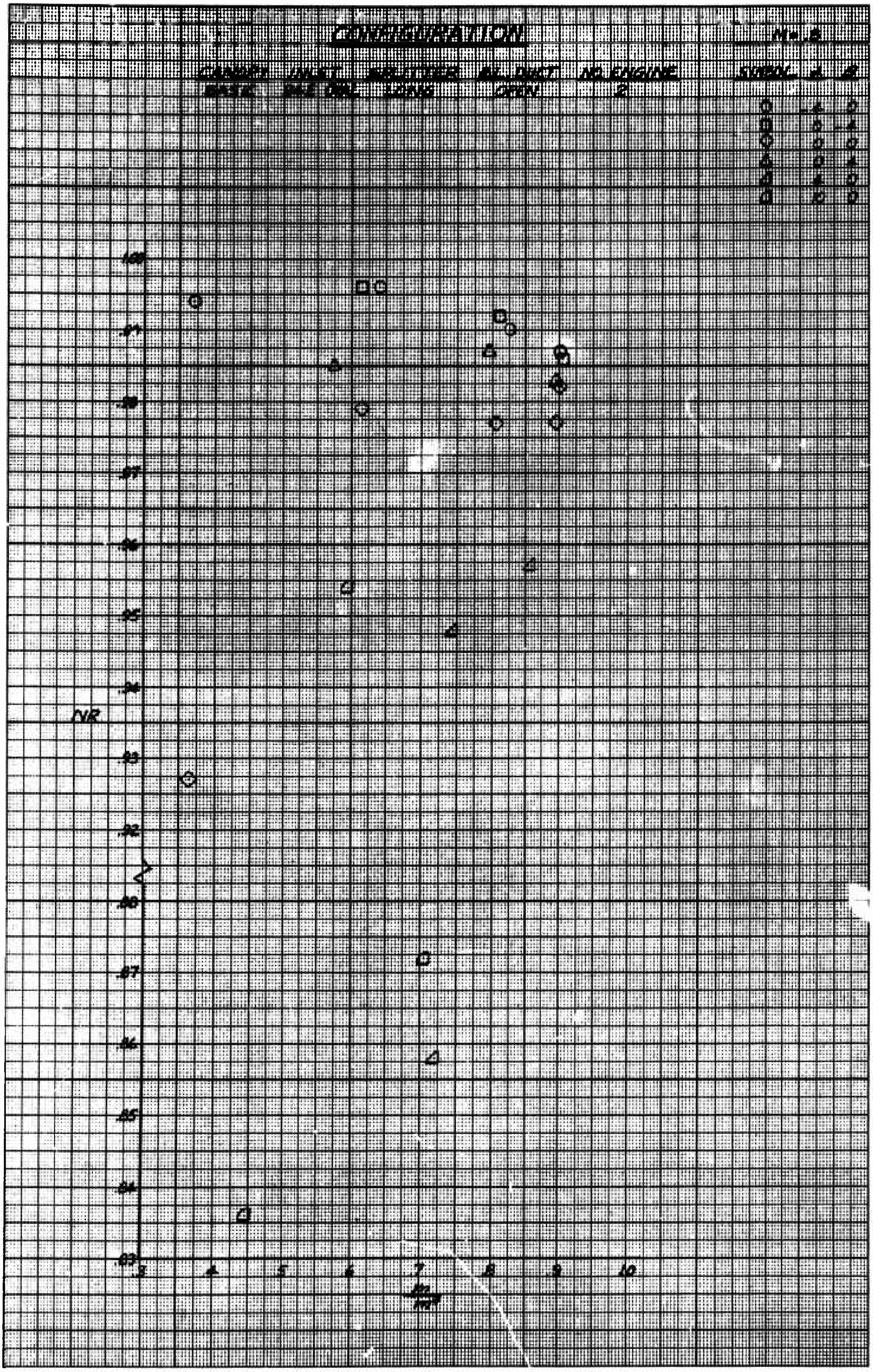

Figure 4-18a Total Pressure Recovery (NR), and Maximum Total (K) and Static (L) Pressure Variation vs Mass Flow Ratio (m/m*); Configuration C1I0S1B1E2; Mach No. .8

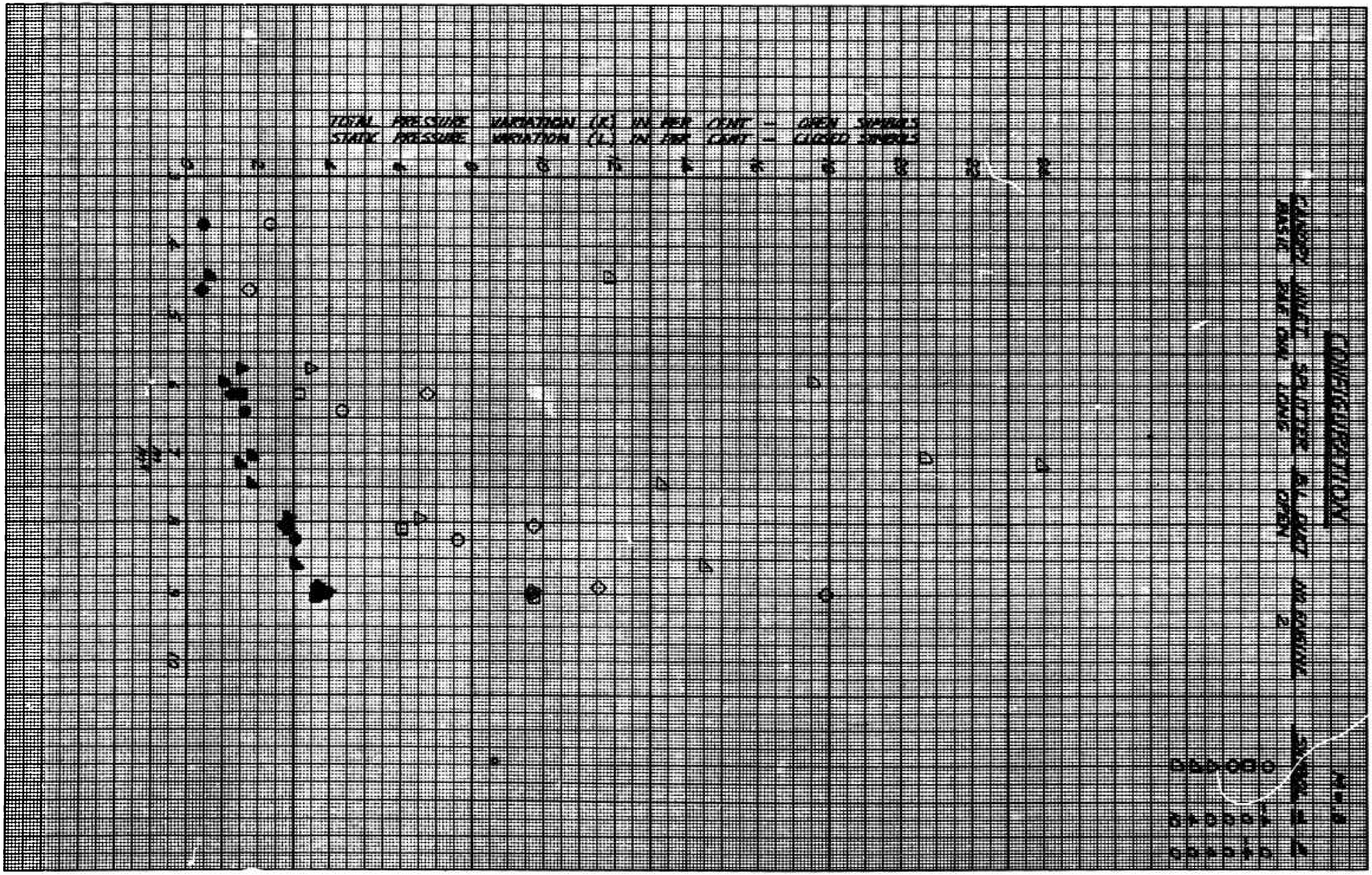

Figure 4-18b Total Pressure Recovery (NR), and Maximum Total (K) and Static (L) Pressure Variation vs Mass Flow Ratio (m/m*); Configuration C1I0S1B1E2; Mach No. .8

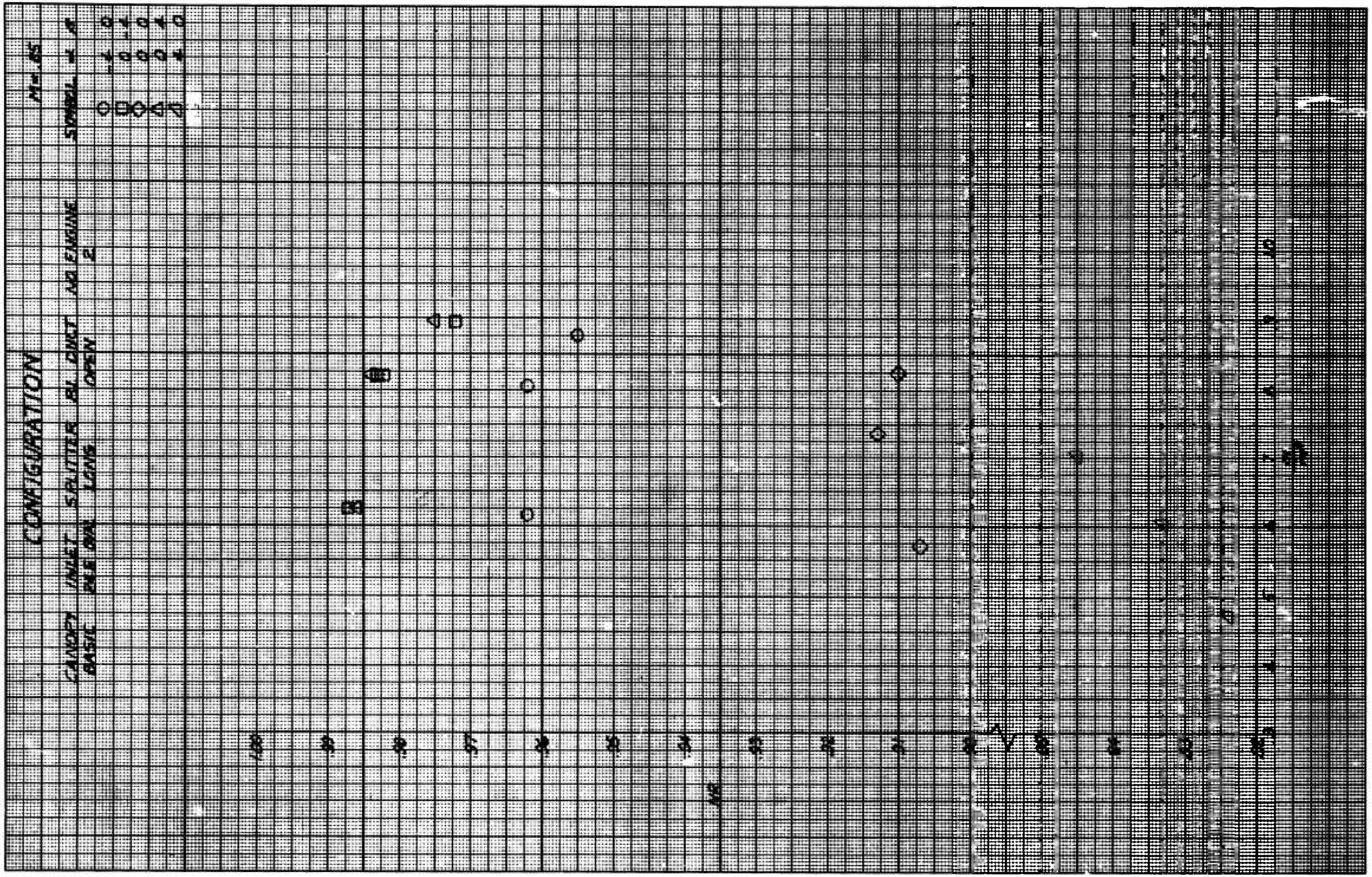

Figure 4-19a Total Pressure Recovery (NR), and Maximum Total (K) and Static (L) Pressure Variation vs Mass Flow Ratio (m/m*); Configuration C1I0S1B1E2; Mach No. .85

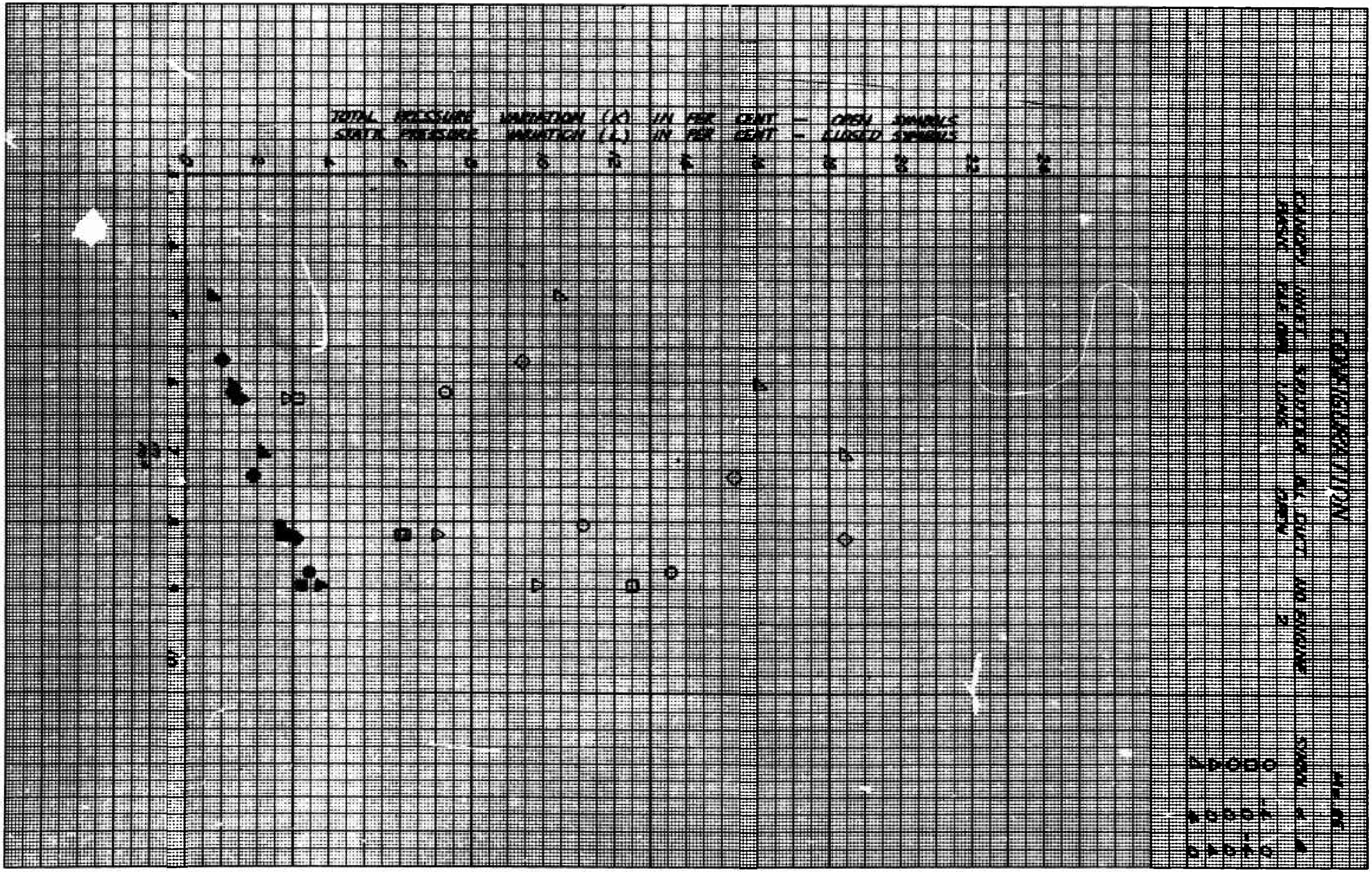

Figure 4-19b Total Pressure Recovery (NR), and Maximum Total (K) and Static (L) Pressure Variation vs Mass Flow Ratio (m/m*); Configuration C1I0S1B1E2; Mach No. .85

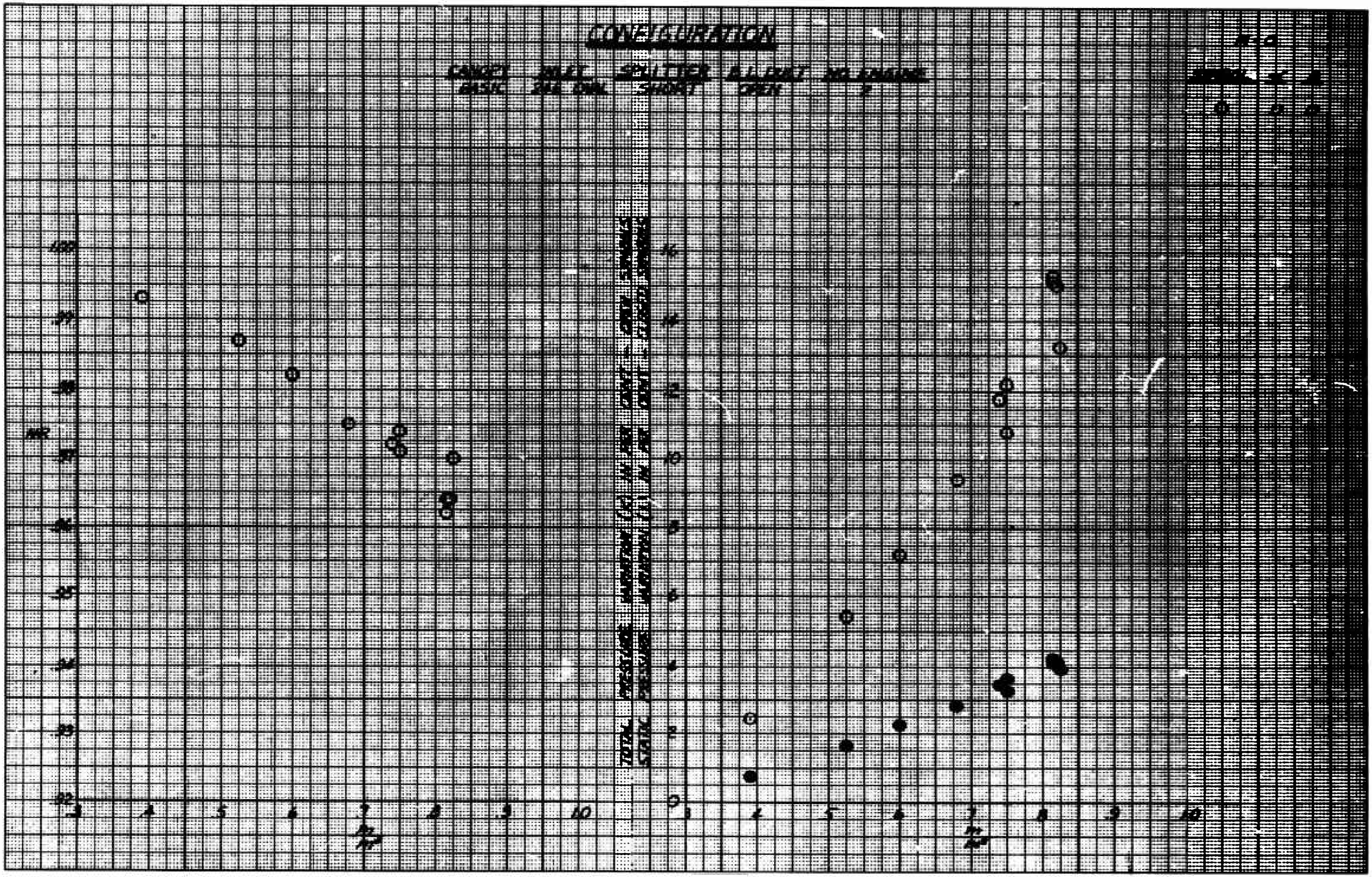

Figure 4-20 Total Pressure Recovery (NR), and Maximum Total (K) and Static (L) Pressure Variation vs Mass Flow Ratio (m/m*); Configuration C1I0S0B1E2; Mach No. 0

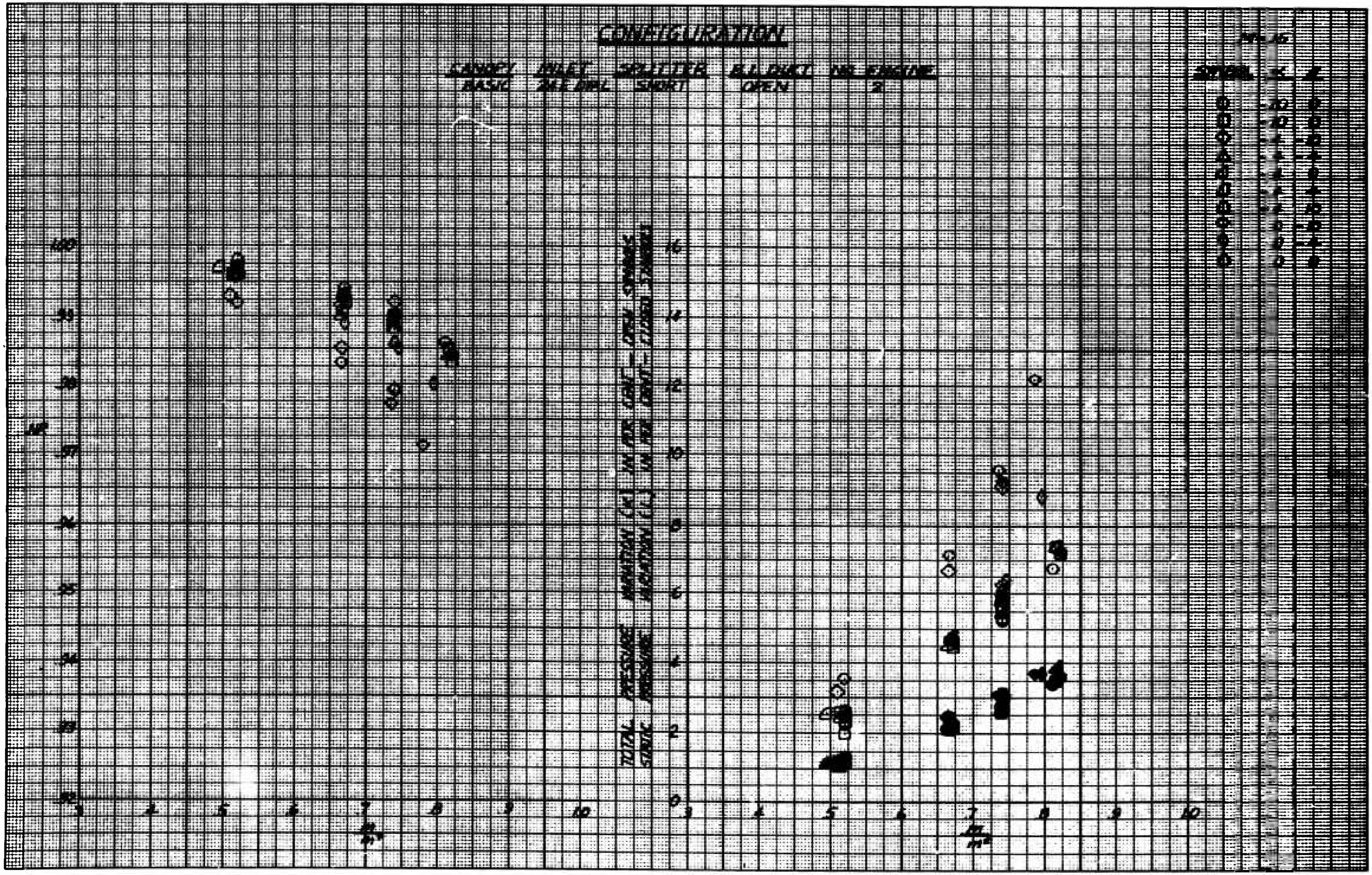

Figure 4-21a Total Pressure Recovery (NR), and Maximum Total (K) and Static (L) Pressure Variation vs Mass Flow Ratio (m/m*); Configuration C1I0S0B1E2; Mach No. .15

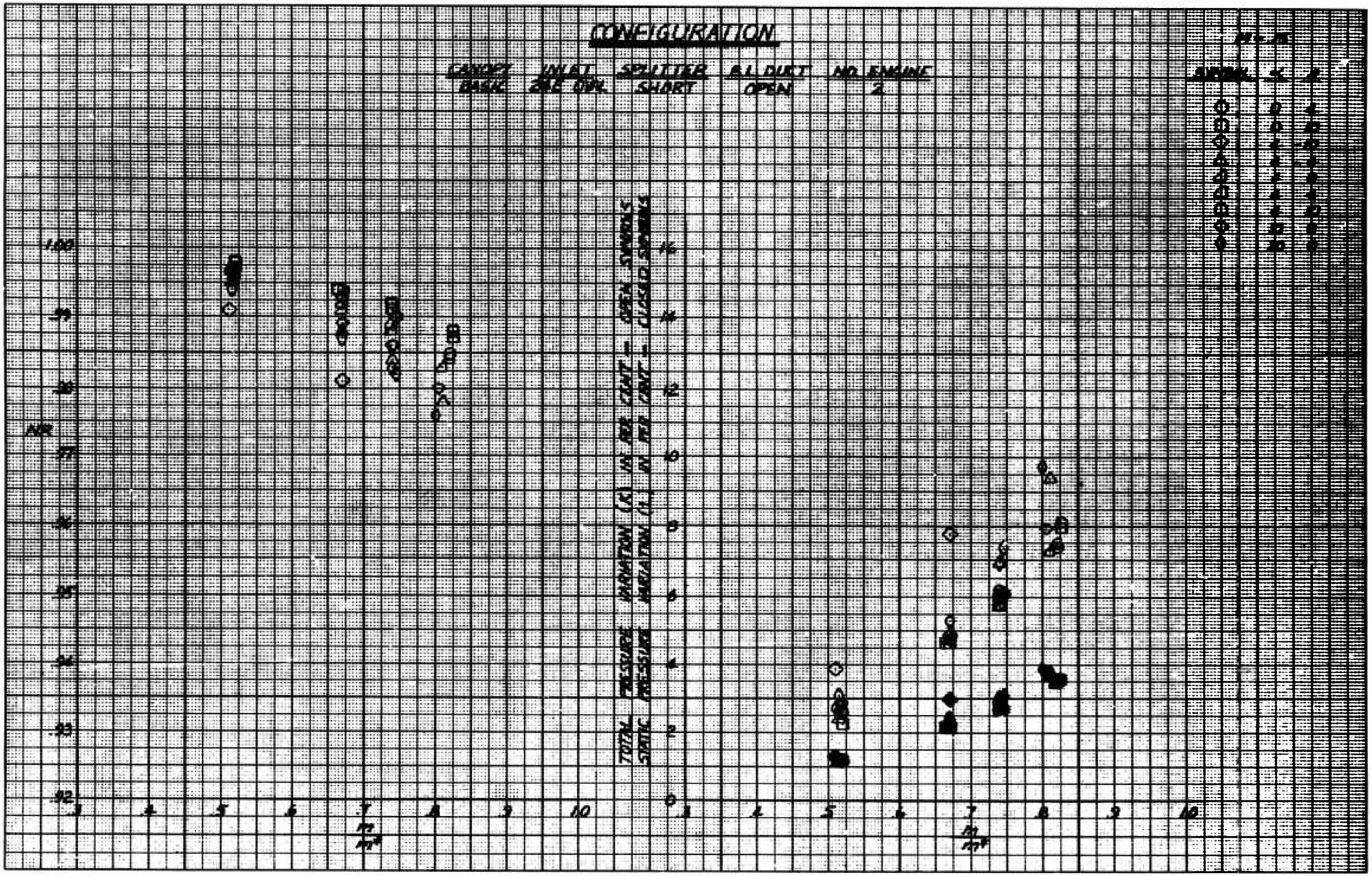

Figure 4-21b Total Pressure Recovery (NR), and Maximum Total (K) and Static (L) Pressure Variation vs Mass Flow Ratio (m/m*); Configuration C1I0S0B1E2; Mach No. .15

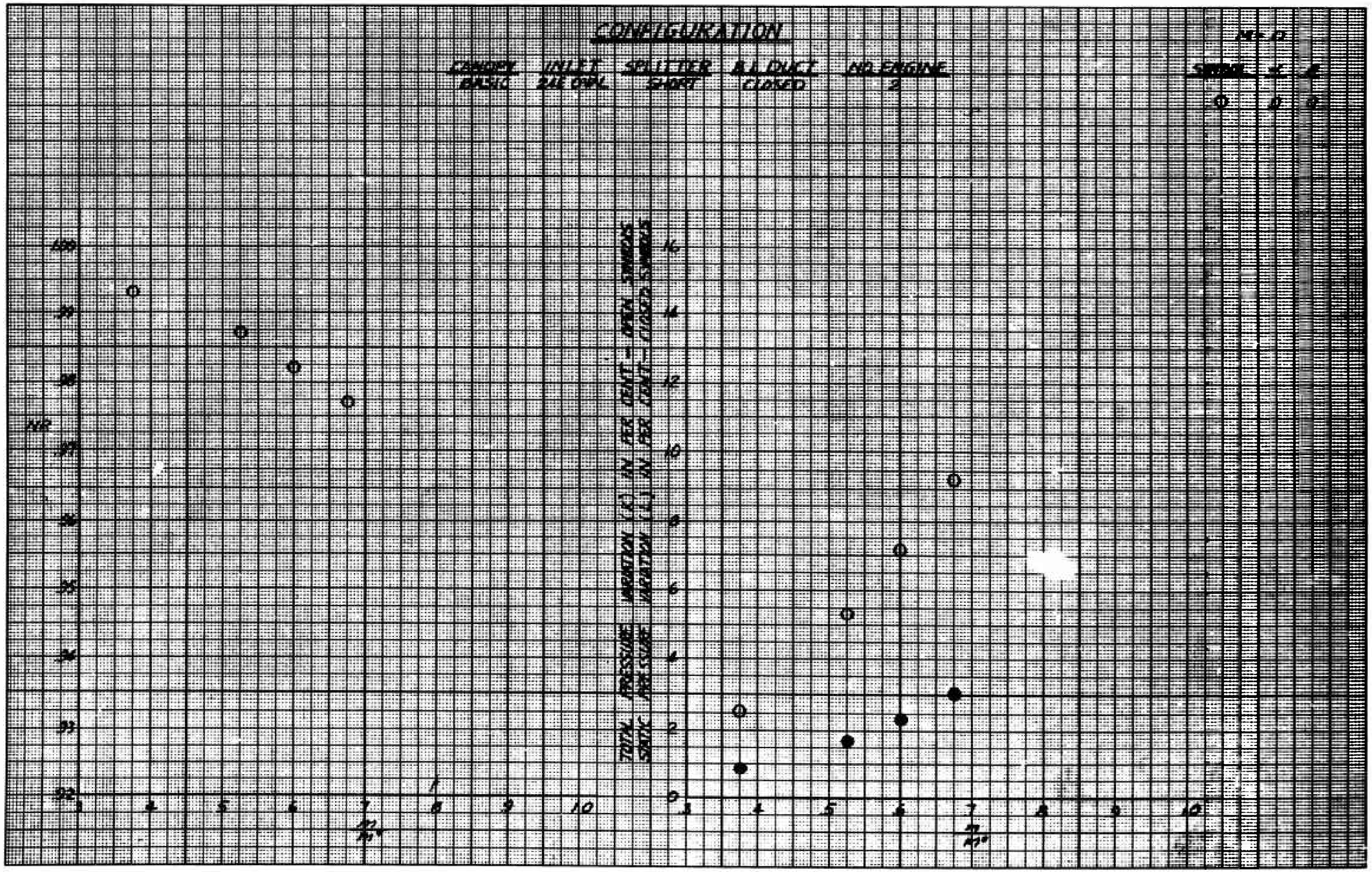

Figure 4-22 Total Pressure Recovery (NR), and Maximum Total (K) and Static (L) Pressure Variation vs Mass Flow Ratio (m/m*); Configuration C1I0S0B0E2; Mach No. 0

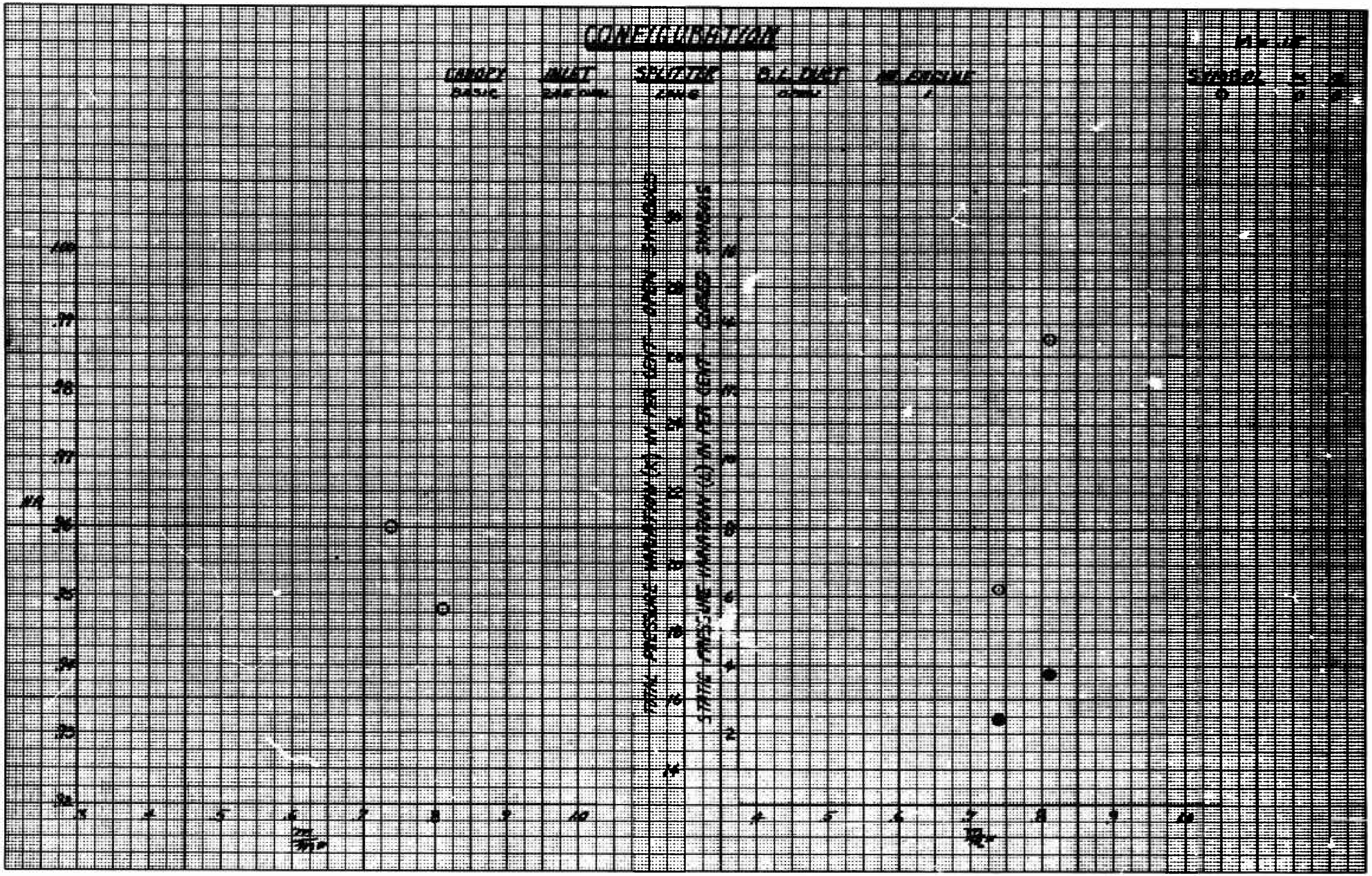

Figure 4-23 Total Pressure Recovery (NR), and Maximum Total (K) and Static (L) Pressure Variation vs Mass Flow Ratio (m/m*); Configuration C1I0S1B1E1; Mach No. .15

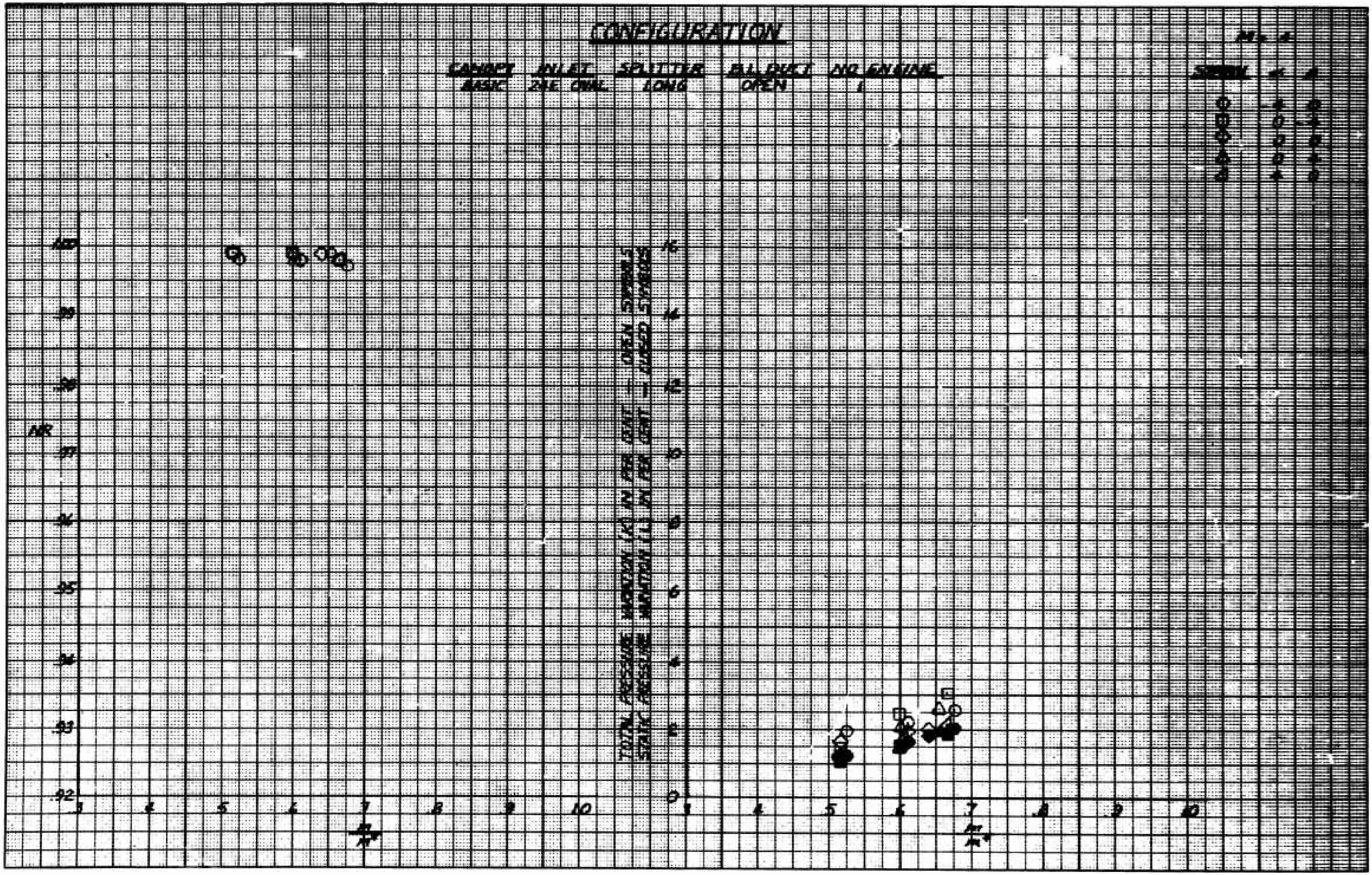

Figure 4-24 Total Pressure Recovery (NR), and Maximum Total (K) and Static (L) Pressure Variation vs Mass Flow Ratio (m/m*); Configuration C1I0S1B1E1; Mach No. .4

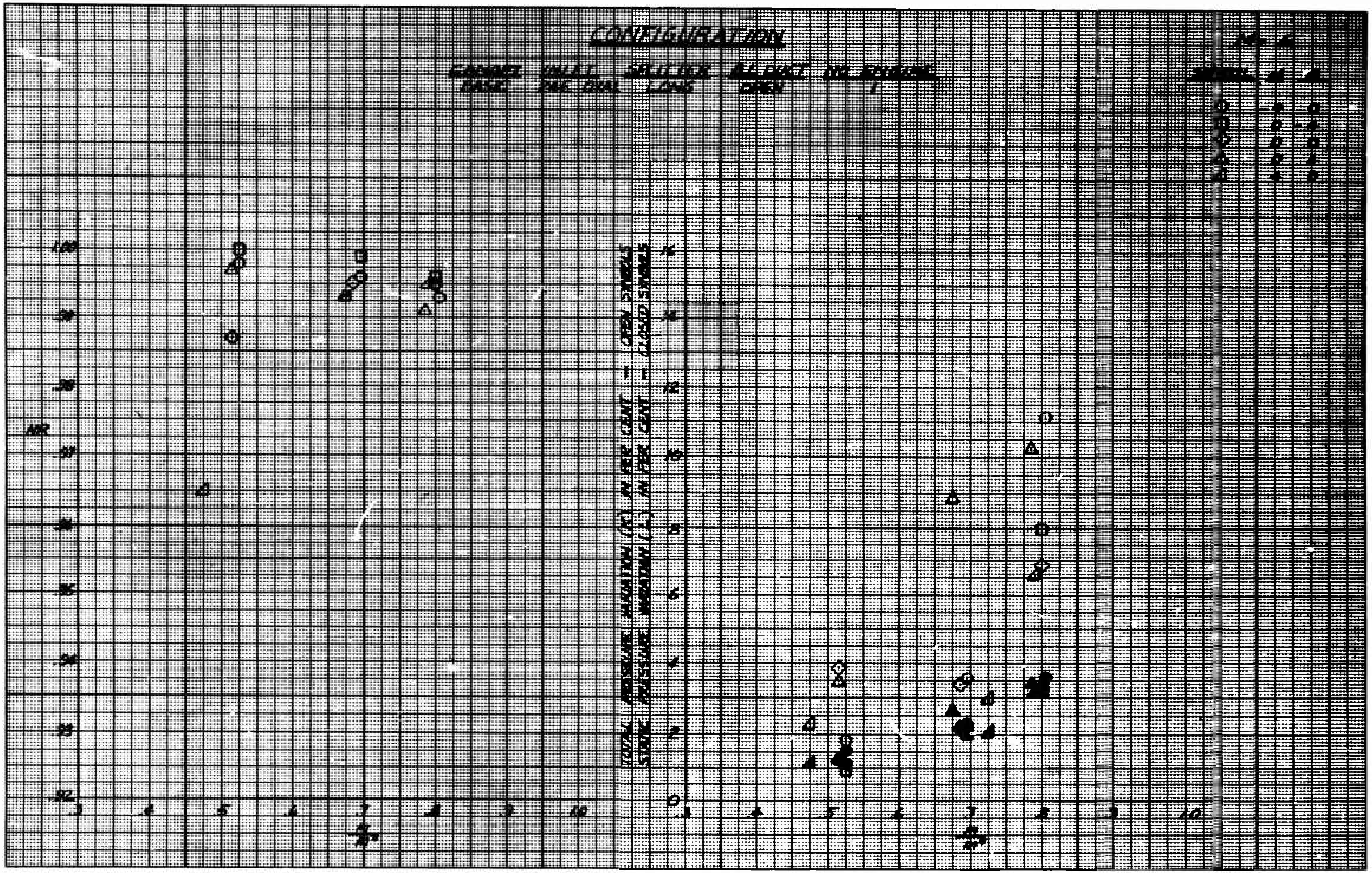

Figure 4-25 Total Pressure Recovery (NR), and Maximum Total (K) and Static (L) Pressure Variations vs Mass Flow Ratio (m/m*); Configuration C1I0S1B1E1; Mach No. .6

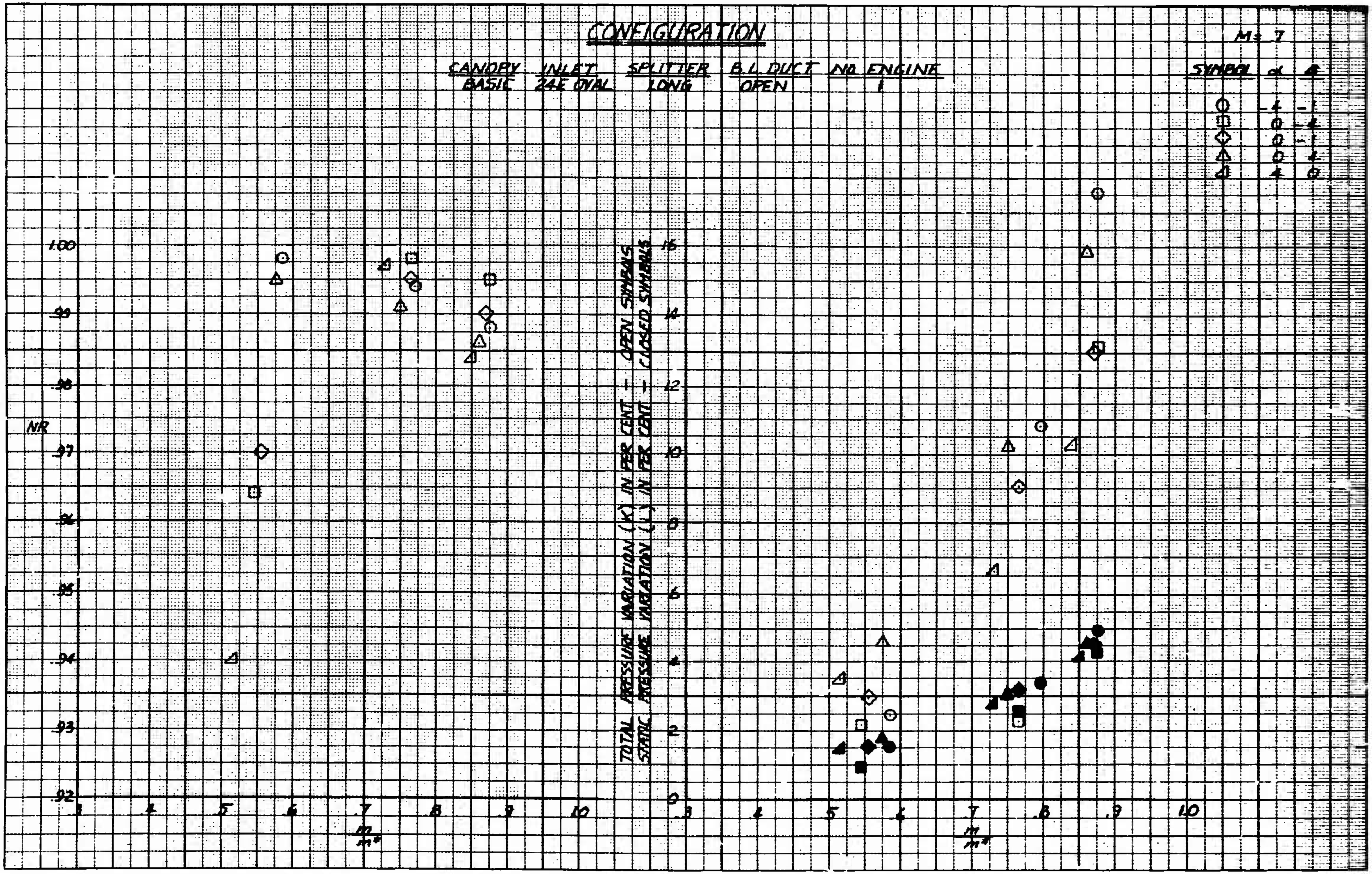

Figure 4-26 Total Pressure Recovery (NR), and Maximum Total (K) and Static (L) Pressure Variation vs Mass Flow Ratio (m/m*); Configuration C1I0S1B1E1; Mach No. .7

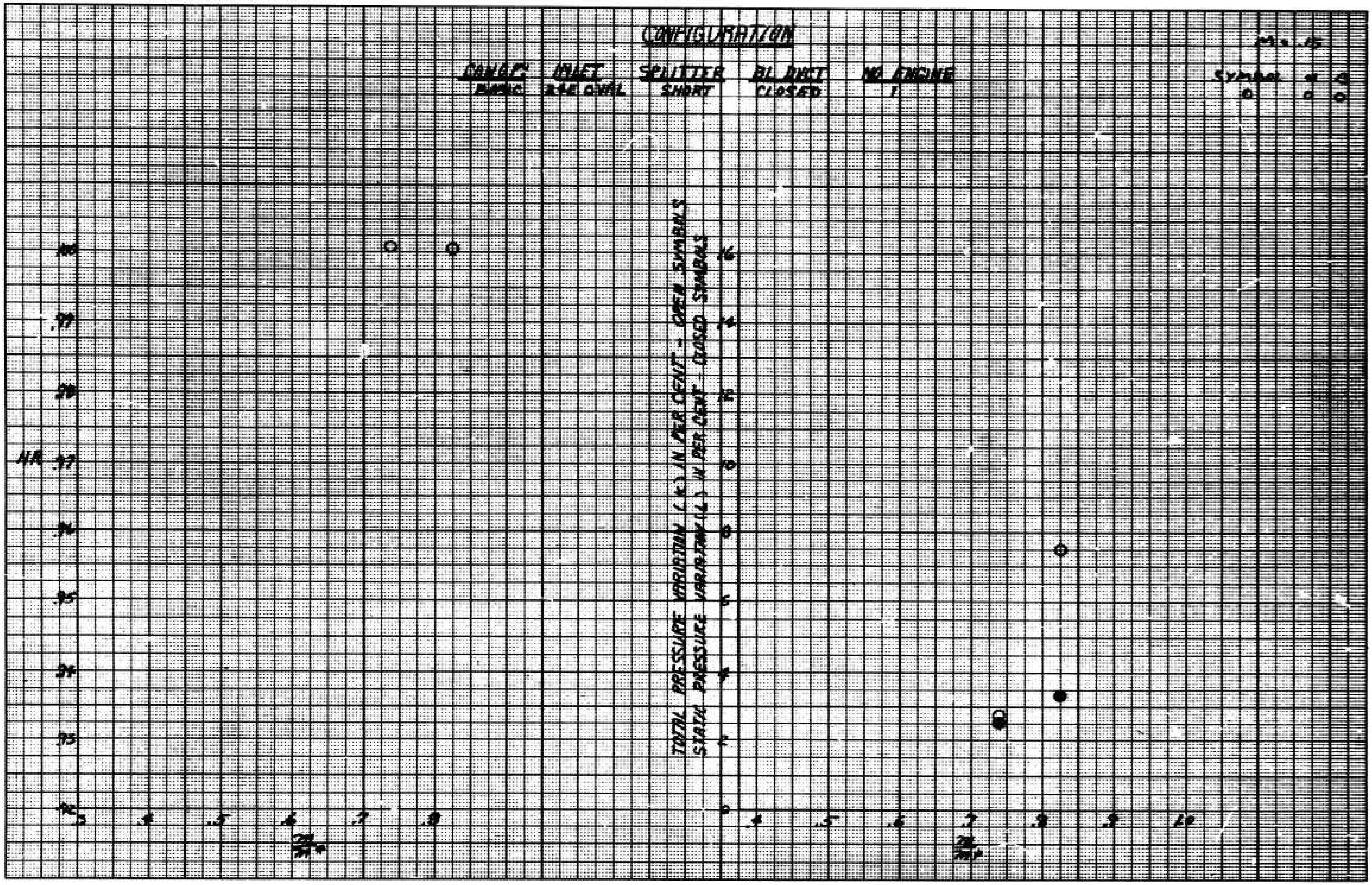

Figure 4-27 Total Pressure Recovery (NR), and Maximum Total (K) and Static (L) Pressure Variation vs Mass Flow Ratio (m/m*); Configuration C1I0S0B1E1; Mach No. .15

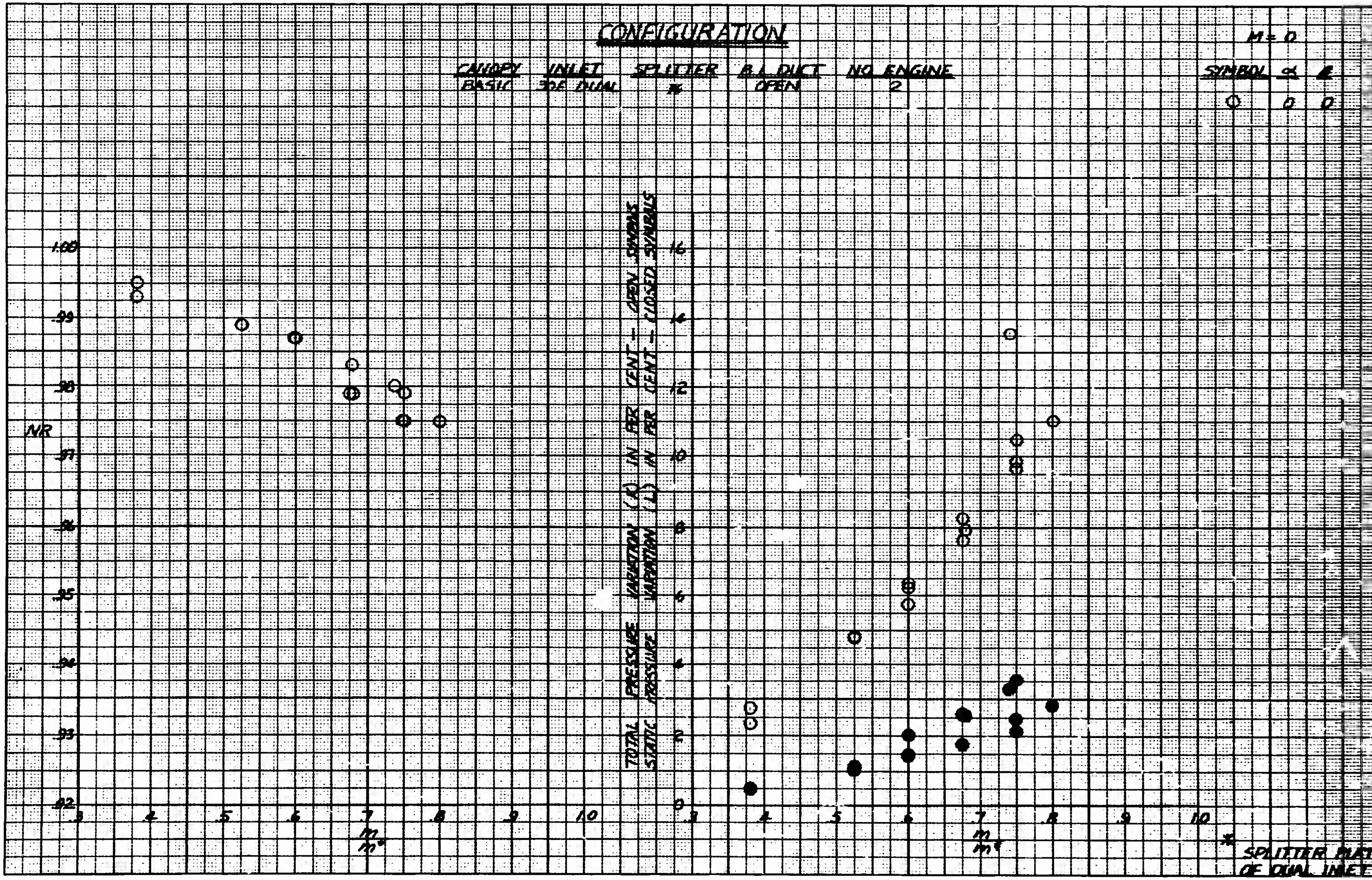

Figure 4-28 Total Pressure Recovery (NR), and Maximum Total (K) and Static (L) Pressure Variation vs Mass Flow Ratio (m/m*); Configuration C1I2S2B1E2; Mach No. 0

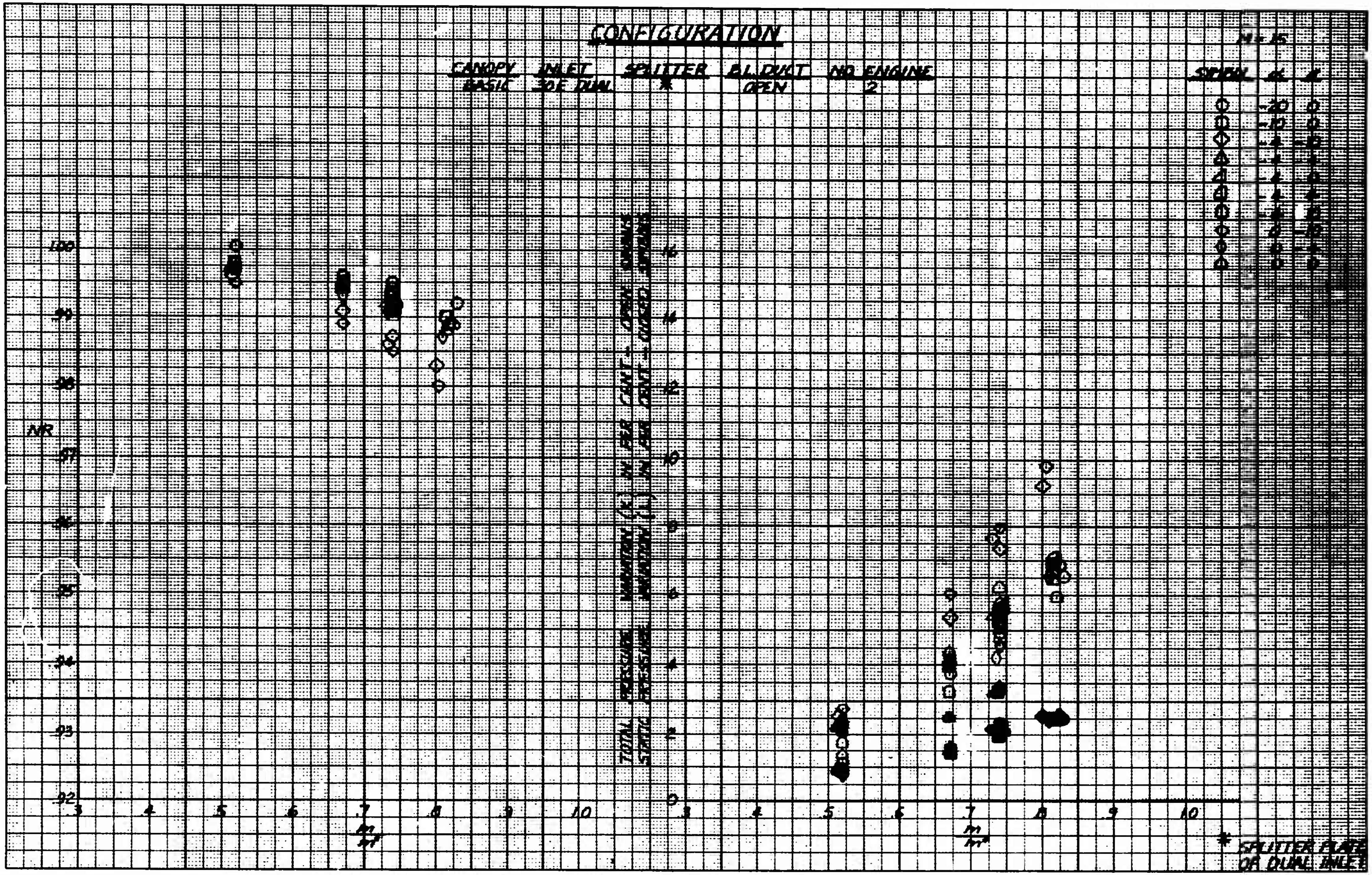

Figure 4-29a Total Pressure Recovery (NR), and Maximum Total (K) and Static (L) Pressure Variations vs Mass Flow Ratio (m/m*); Configuration C1I2S2B1E2; Mach No. .15

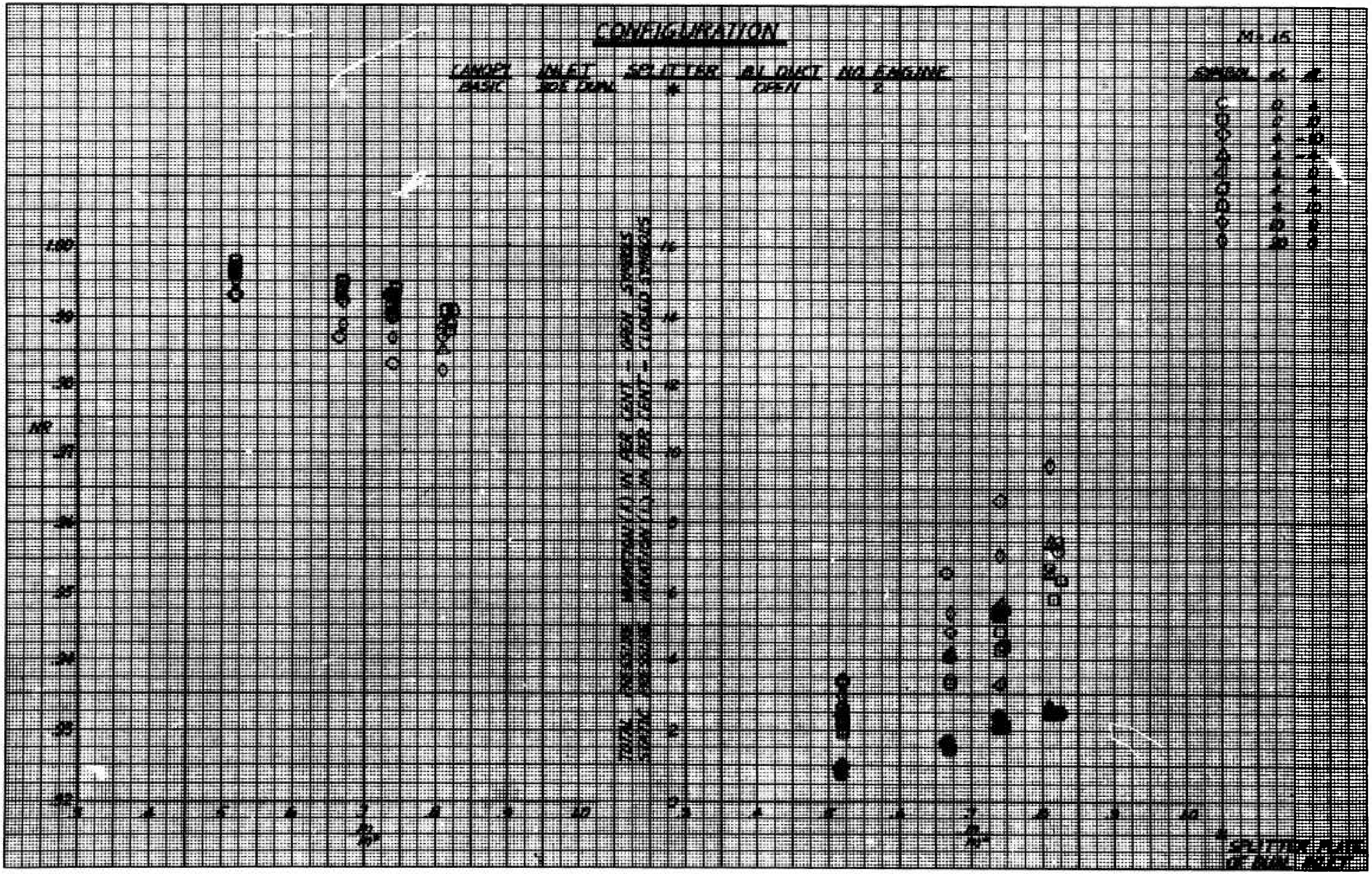

Figure 4-29b Total Pressure Recovery (NR), and Maximum Total (K) and Static (L) Pressure Variations vs Mass Flow Ratio (m/m*); Configuration C1I2S2B1E2; Mach No. .15

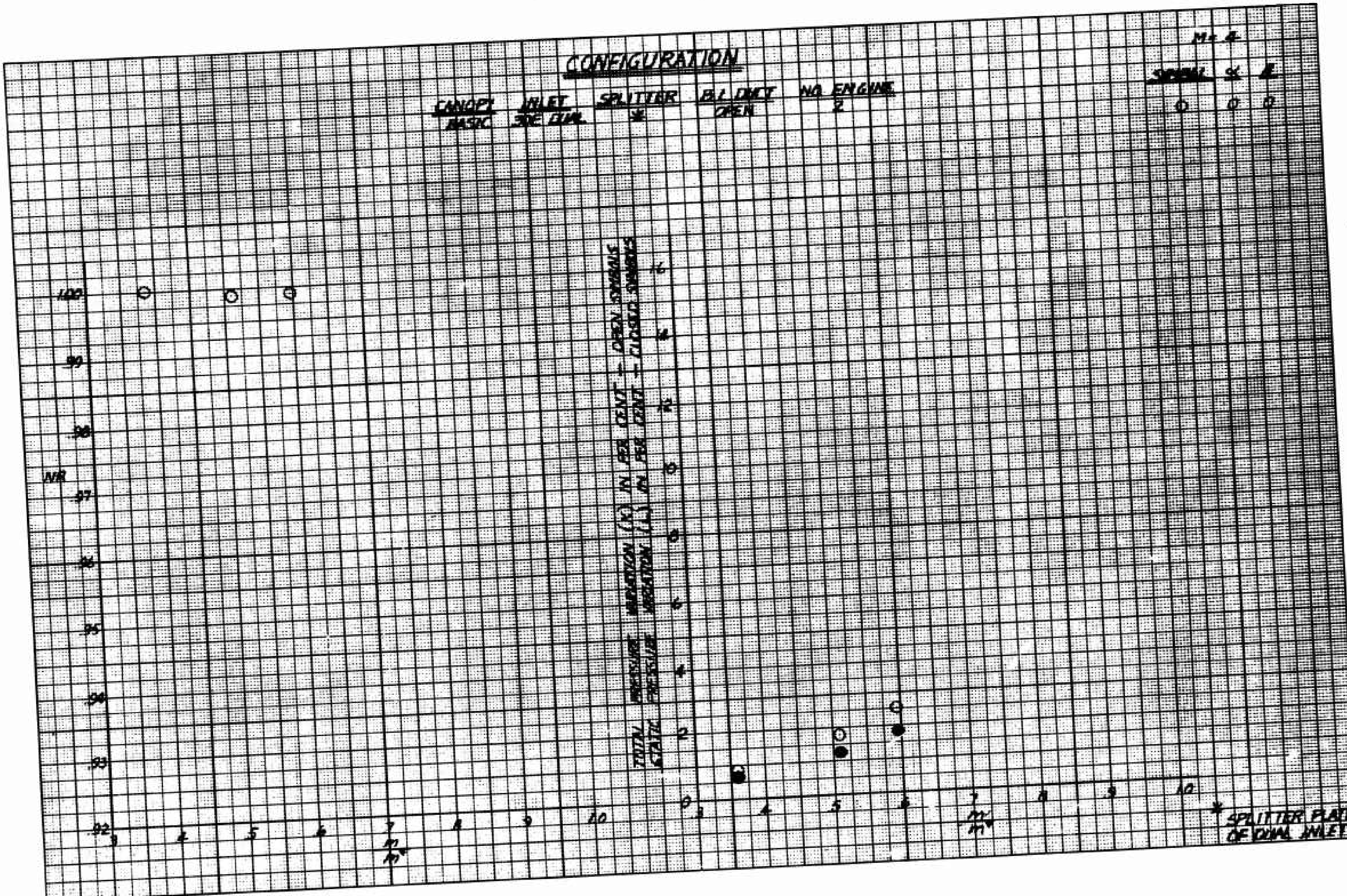

Figure 4-30 Total Pressure Recovery (NR), and Maximum Total (K) and Static (L) Pressure Variation vs Mass Flow Ratio (m/m*); Configuration C1I2S2B1E2; Mach No. .4

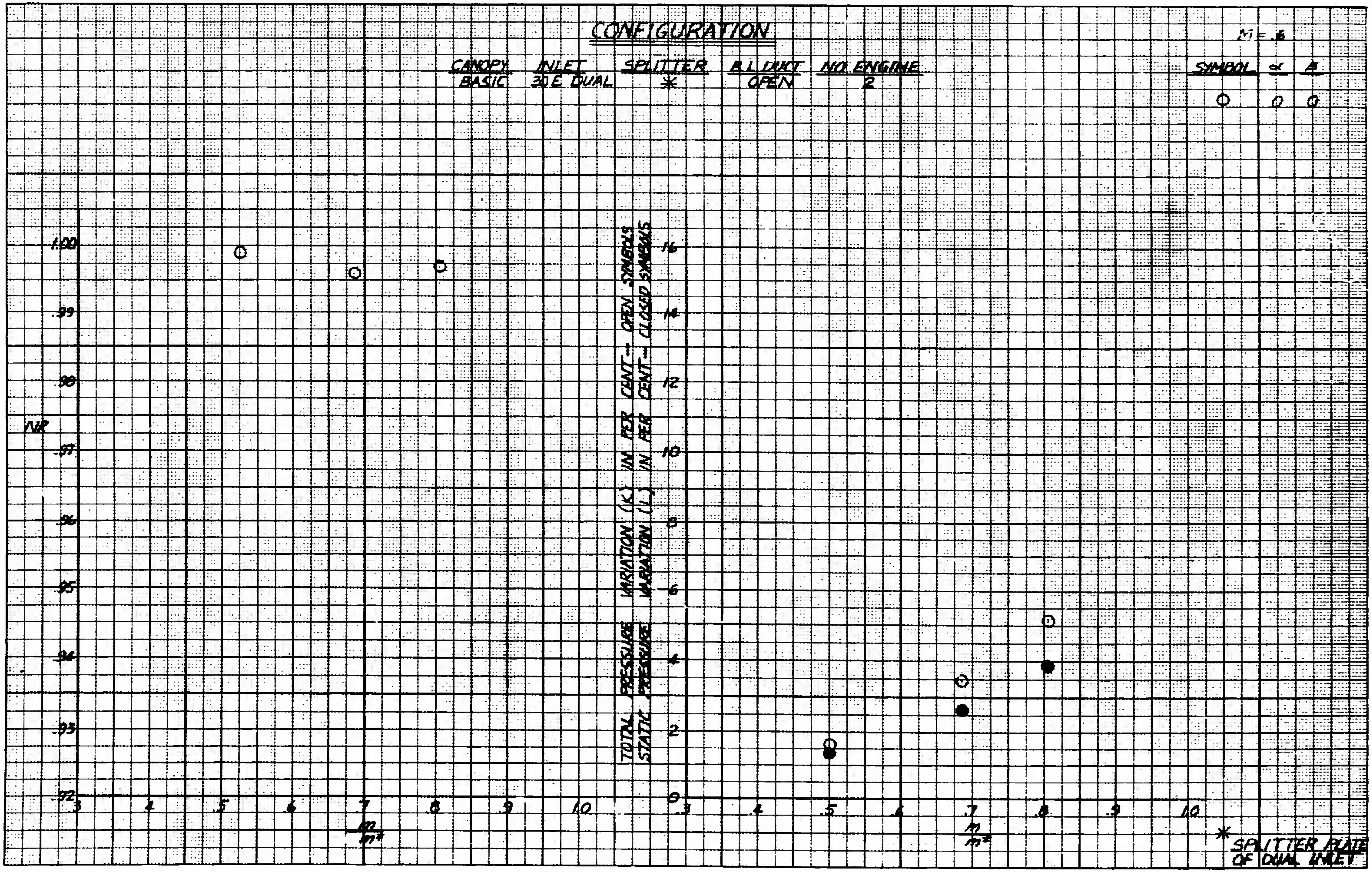

Figure 4-31 Total Pressure Recovery (NR), and Maximum Total (K) and Static (L) Pressure Variations vs Mass Flow Ratio (m/m*); Configuration C1I2S2B1E2; Mach No. .6

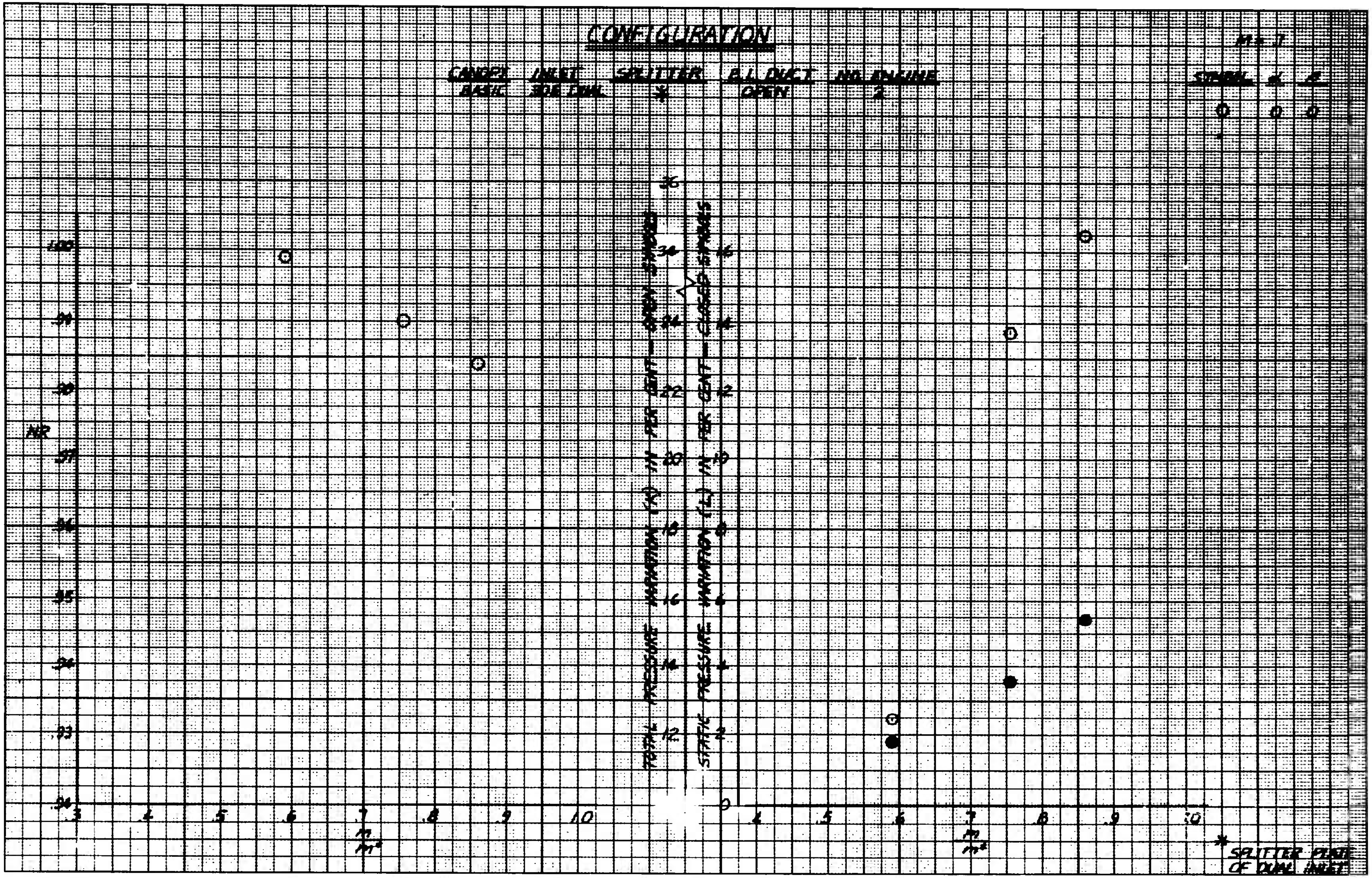

Figure 4-32 Total Pressure Recovery (NR), and Maximum Total (K) and Static (L) Pressure Variations vs Mass Flow Ratio (m/m*); Configuration C1I2S2B1E2; Mach No. .7

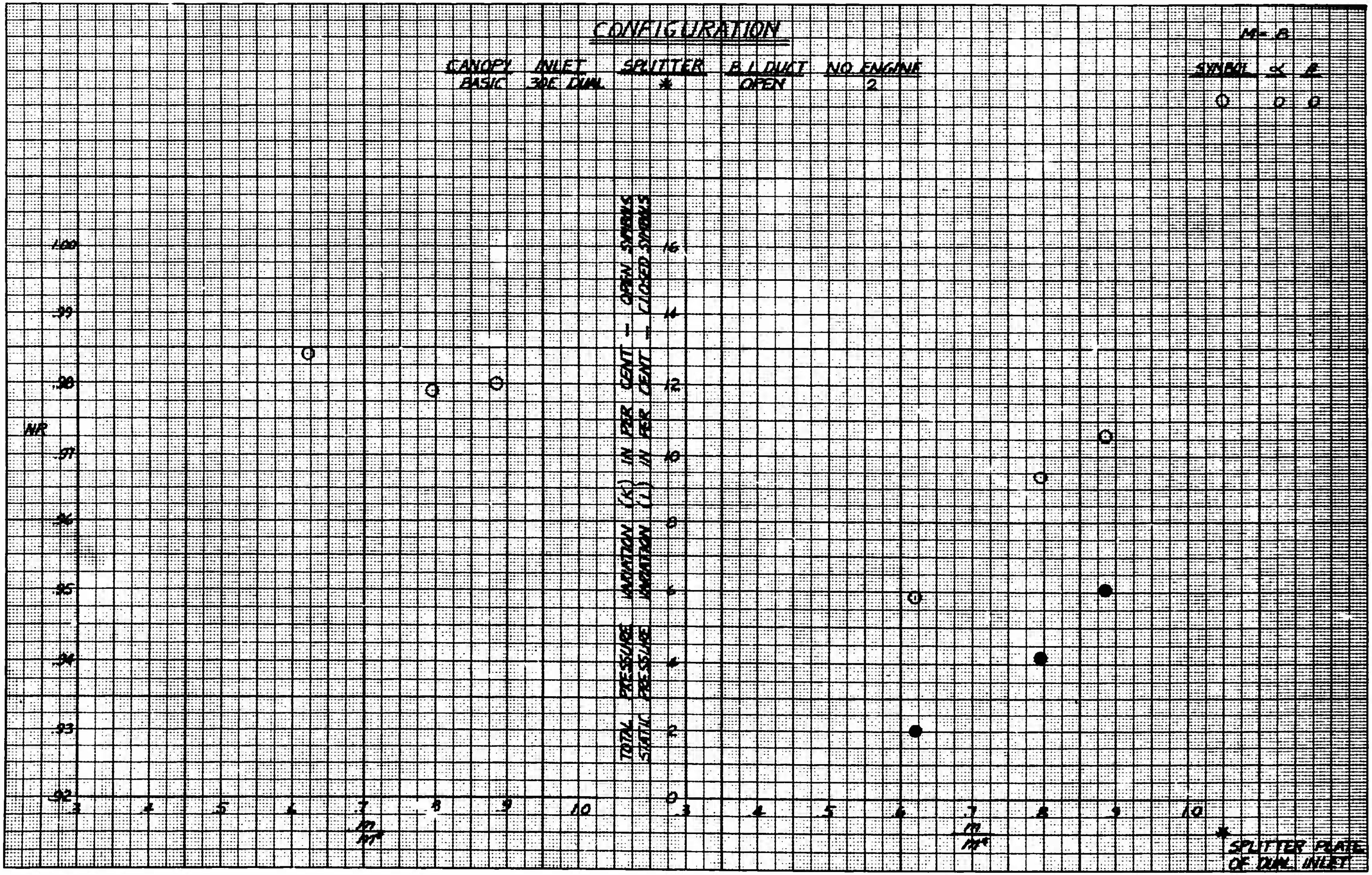

Figure 4-33 Total Pressure Recovery (NR), and Maximum Total (K) and Static (L) Pressure Variation vs Mass Flow Ratio (m/m*); Configuration C1I2S2B1E2; Mach No. .8

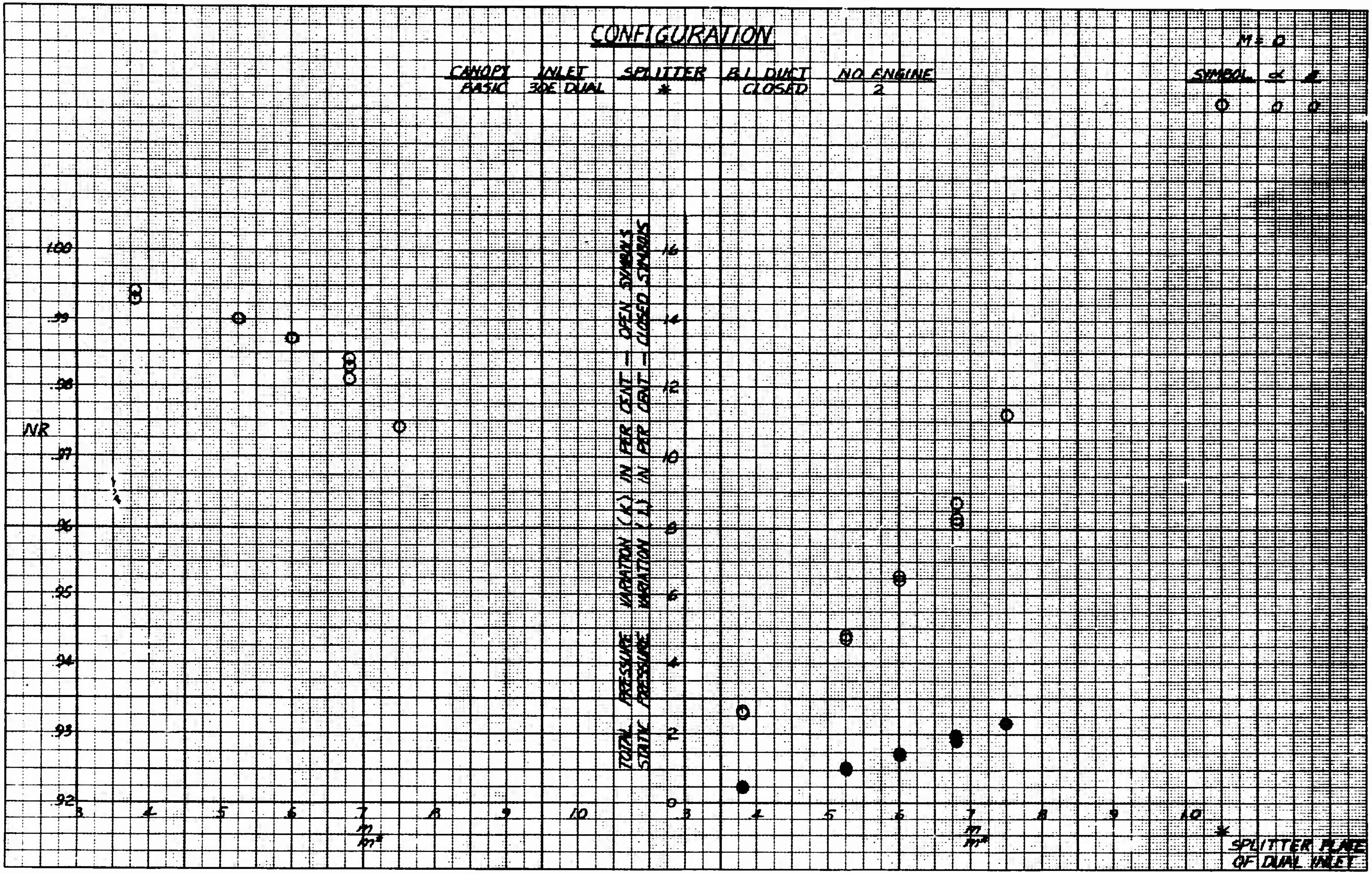

Figure 4-34 Total Pressure Recovery (NR), and Maximum Total (K) and Static (L) Pressure Variation vs Mass Flow Ratio (m/m*); Configuration C1I2S2B0E2; Mach No. 0

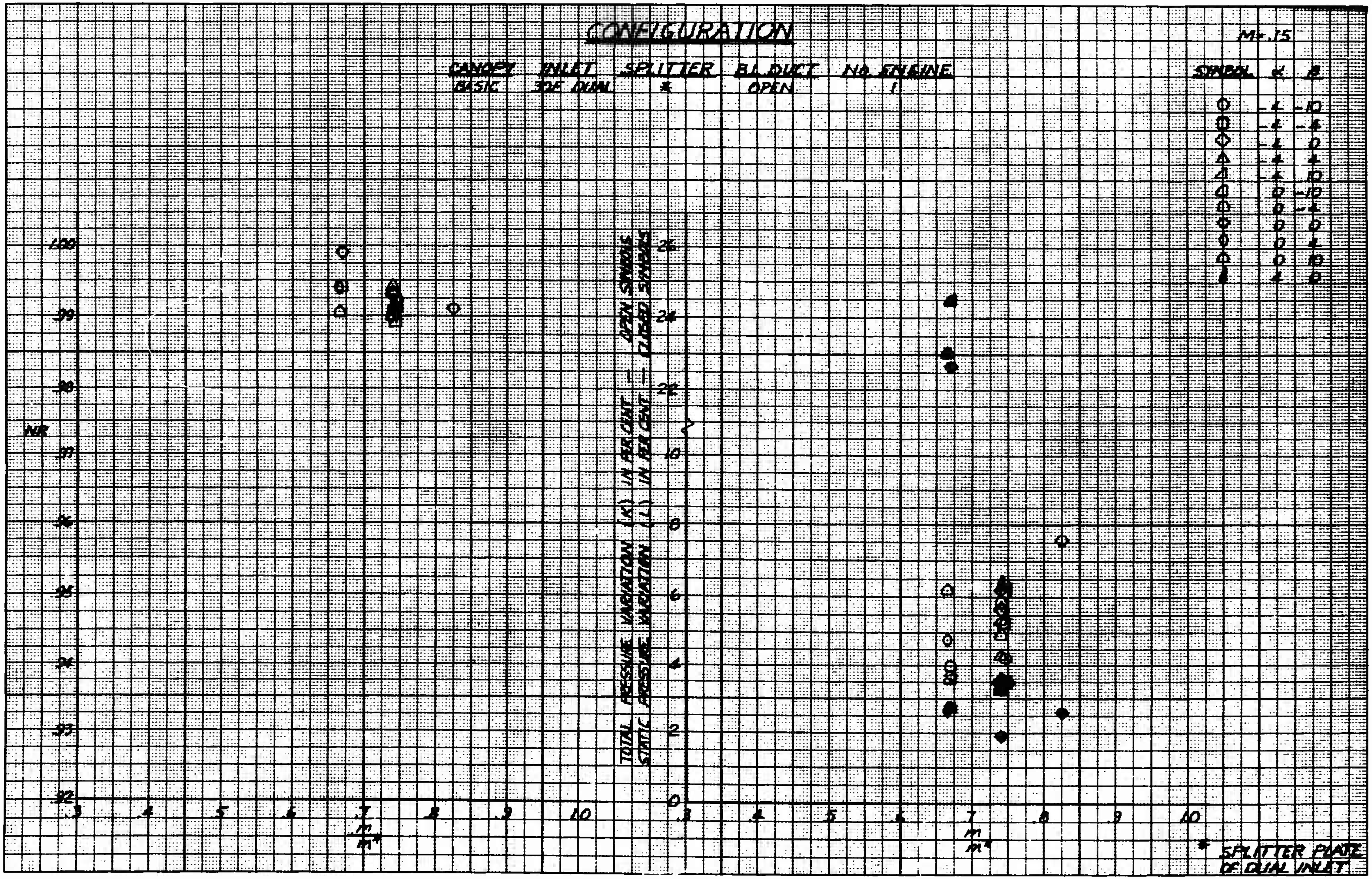

Figure 4-35 Total Pressure Recovery (NR), and Maximum Total (K) and Static (L) Pressure Variation vs Mass Flow Ratio (m/m*); Configuration C1I2S2B1E1; Mach No. .15

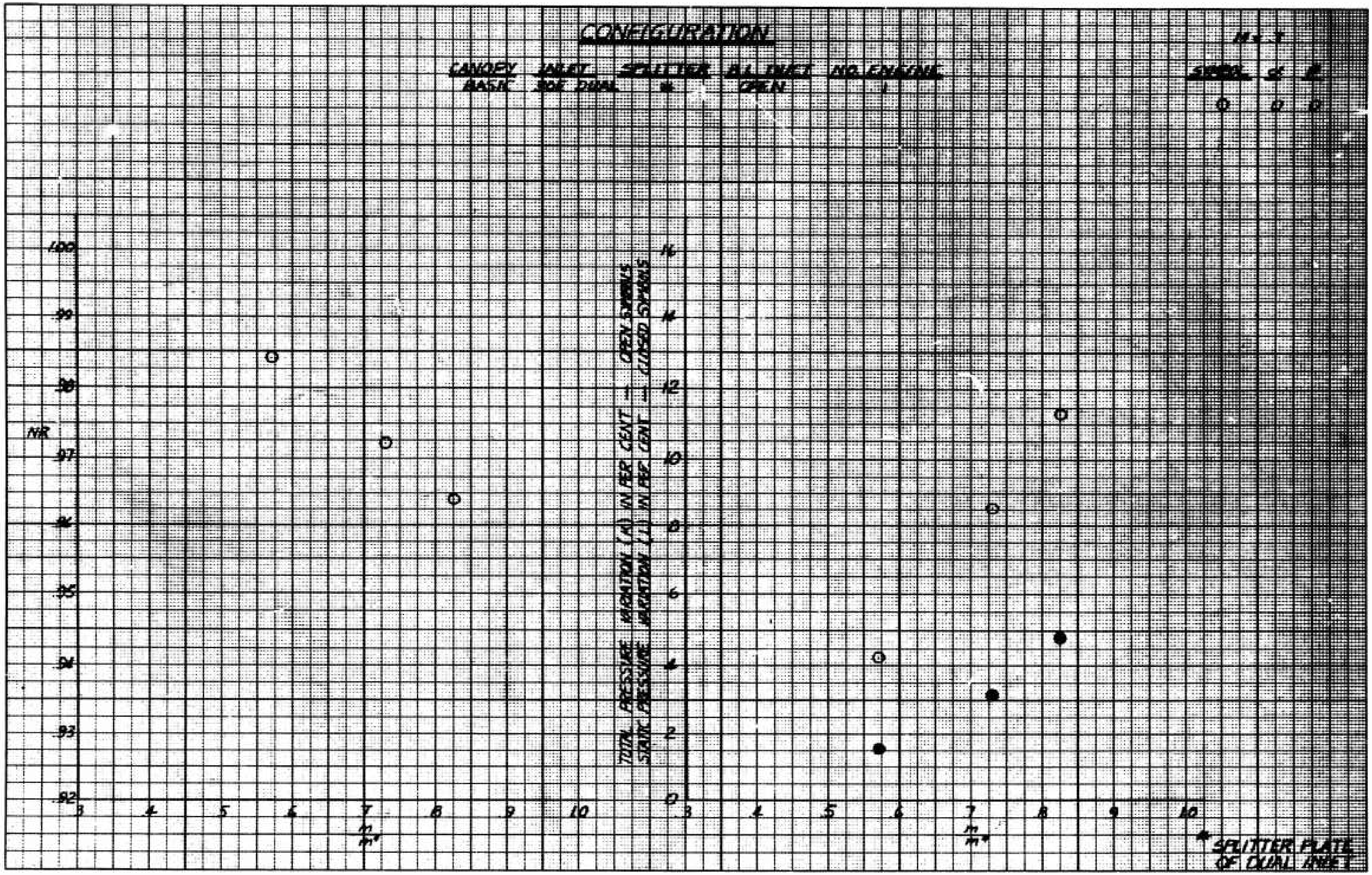

Figure 4-36 Total Pressure Recovery (NR), and Maximum Total (K) and Static (L) Pressure Variation vs Mass Flow Ratio (m/m*); Configuration C1I2S2B1E1; Mach No. .7

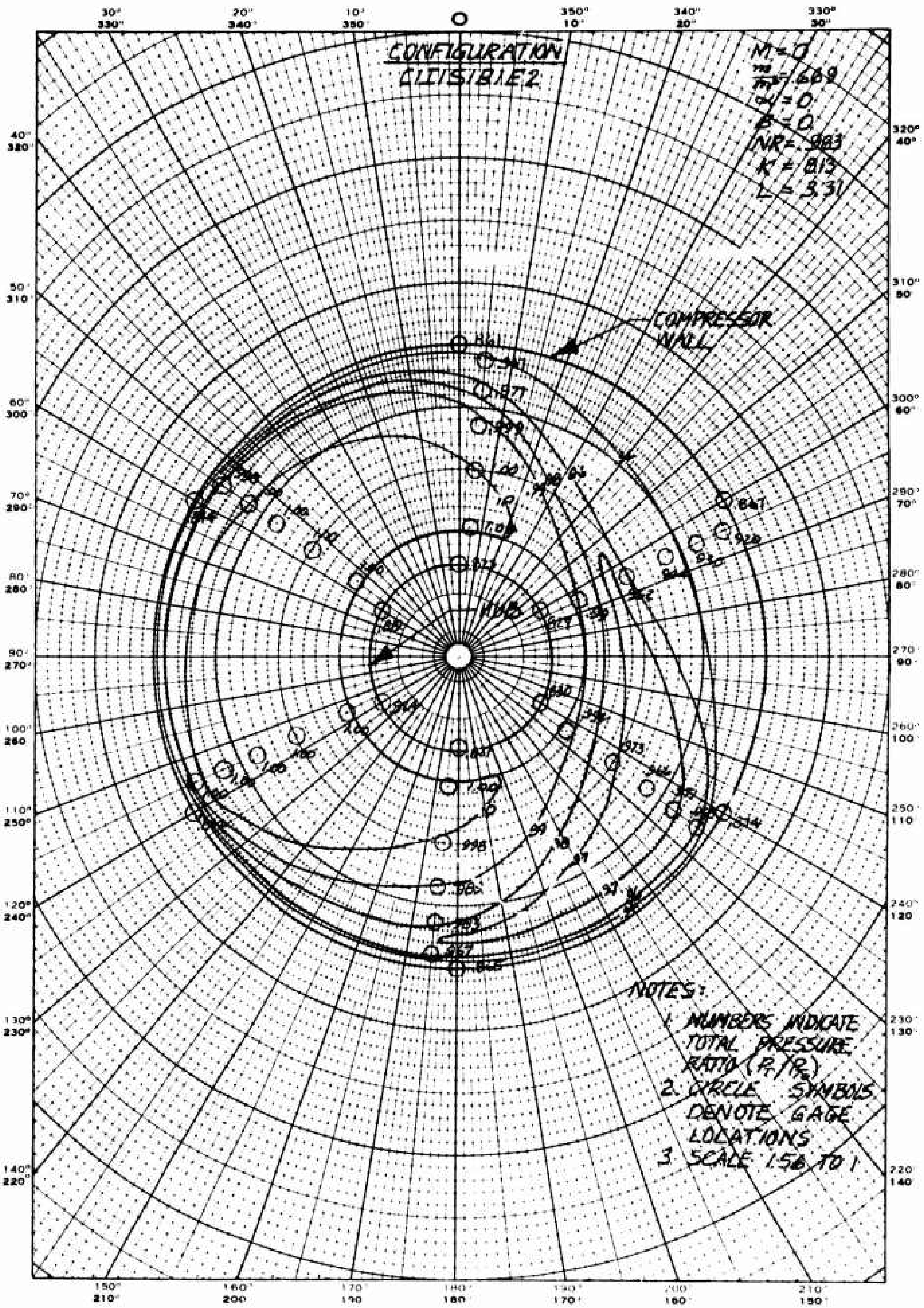

Figure 4-37 Compressor Face Total Pressure Variation, 30E Oval Inlet, Mach No. 0, $\alpha = 0$, $\beta = 0$; $\frac{m}{m^*} = .669$

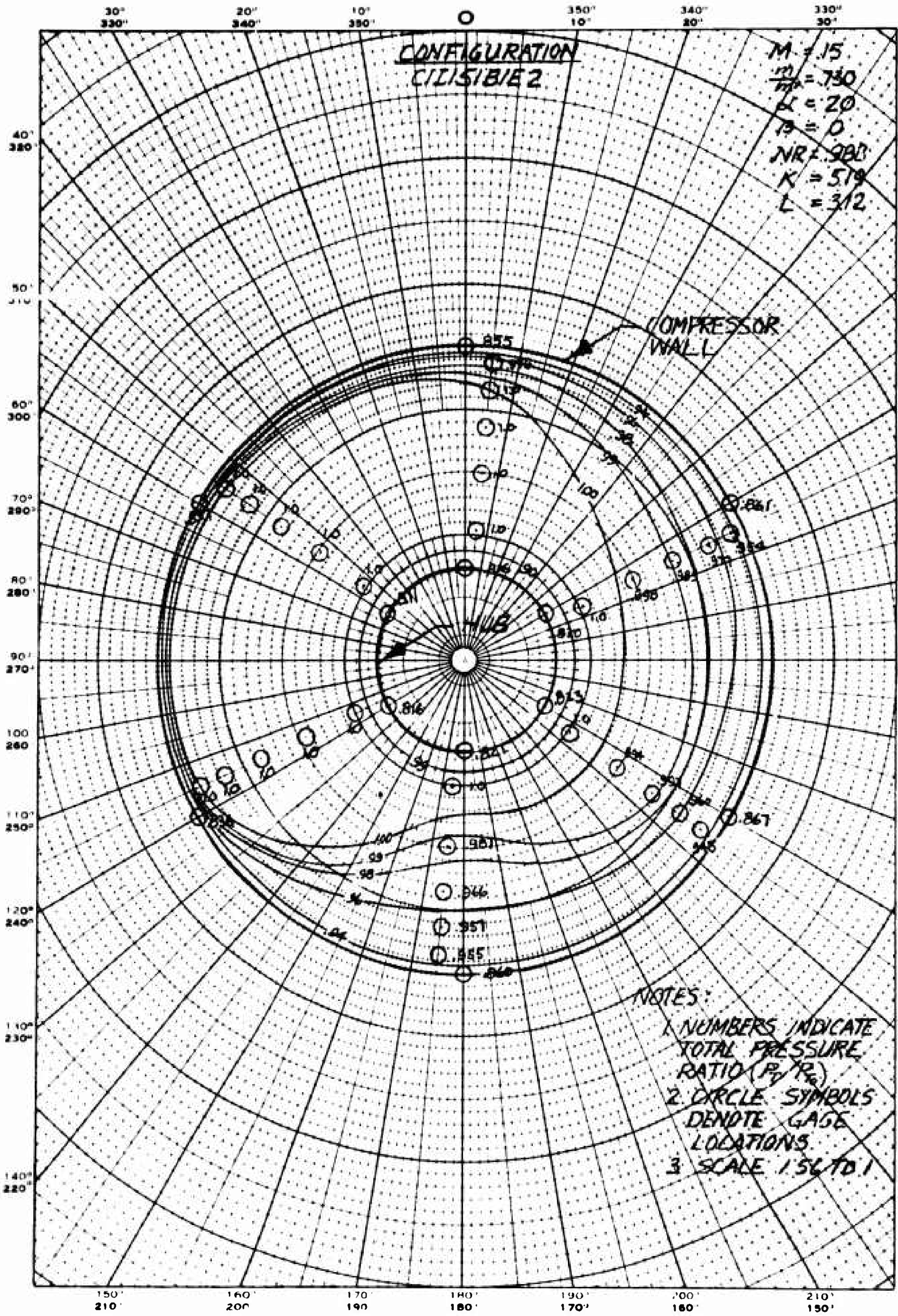

Figure 4-38 Compressor Face Total Pressure Variation, 30E Oval Inlet, Mach No. .15, $\alpha = 20$, $\beta = 0$; $\frac{m}{m^*} = .730$

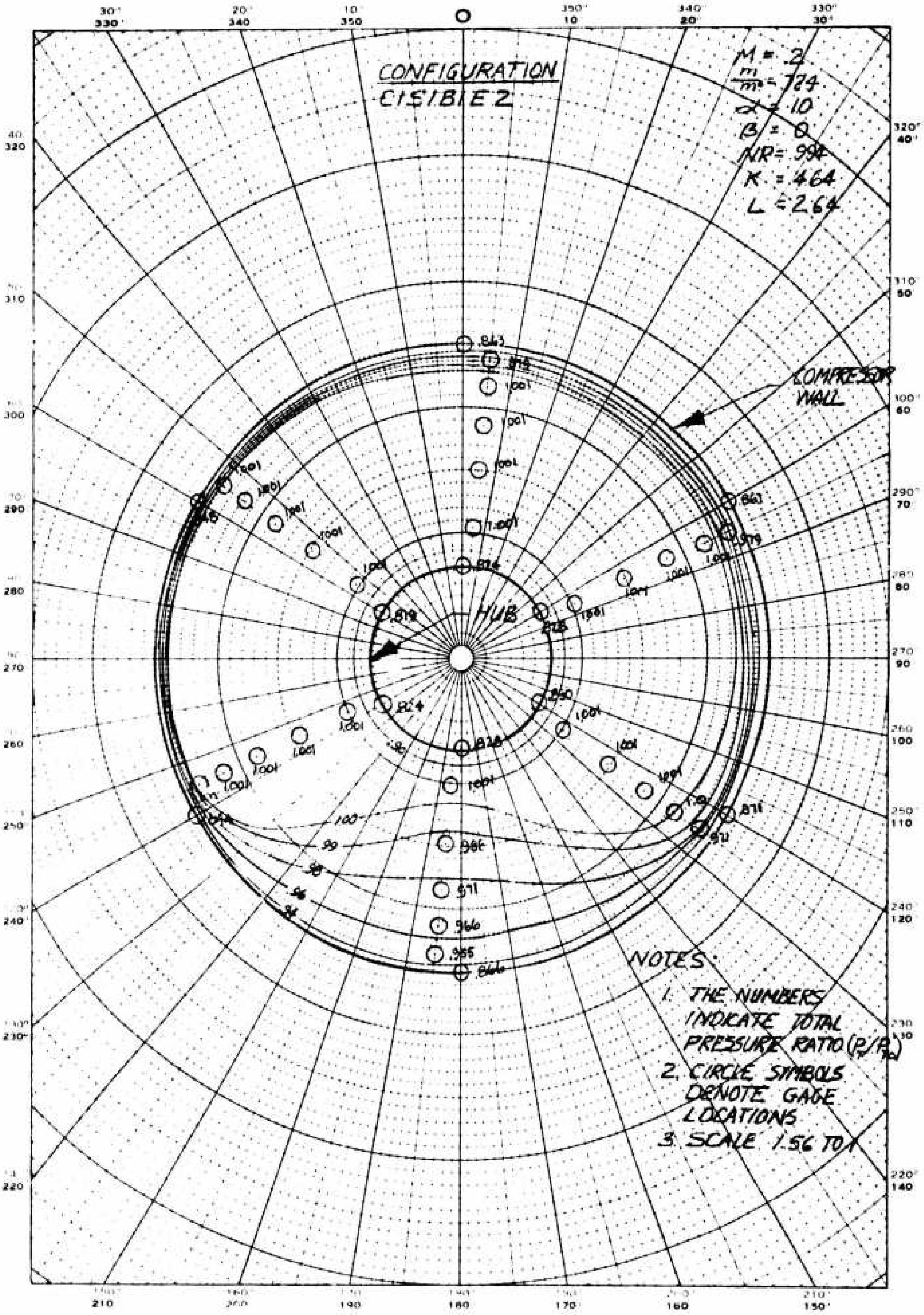

Figure 4-39 Compressor Face Total Pressure Variation, 30E Oval Inlet, Mach No. .2, $\alpha = 10$, $\beta = 0$; $\frac{m}{m^*} = .724$

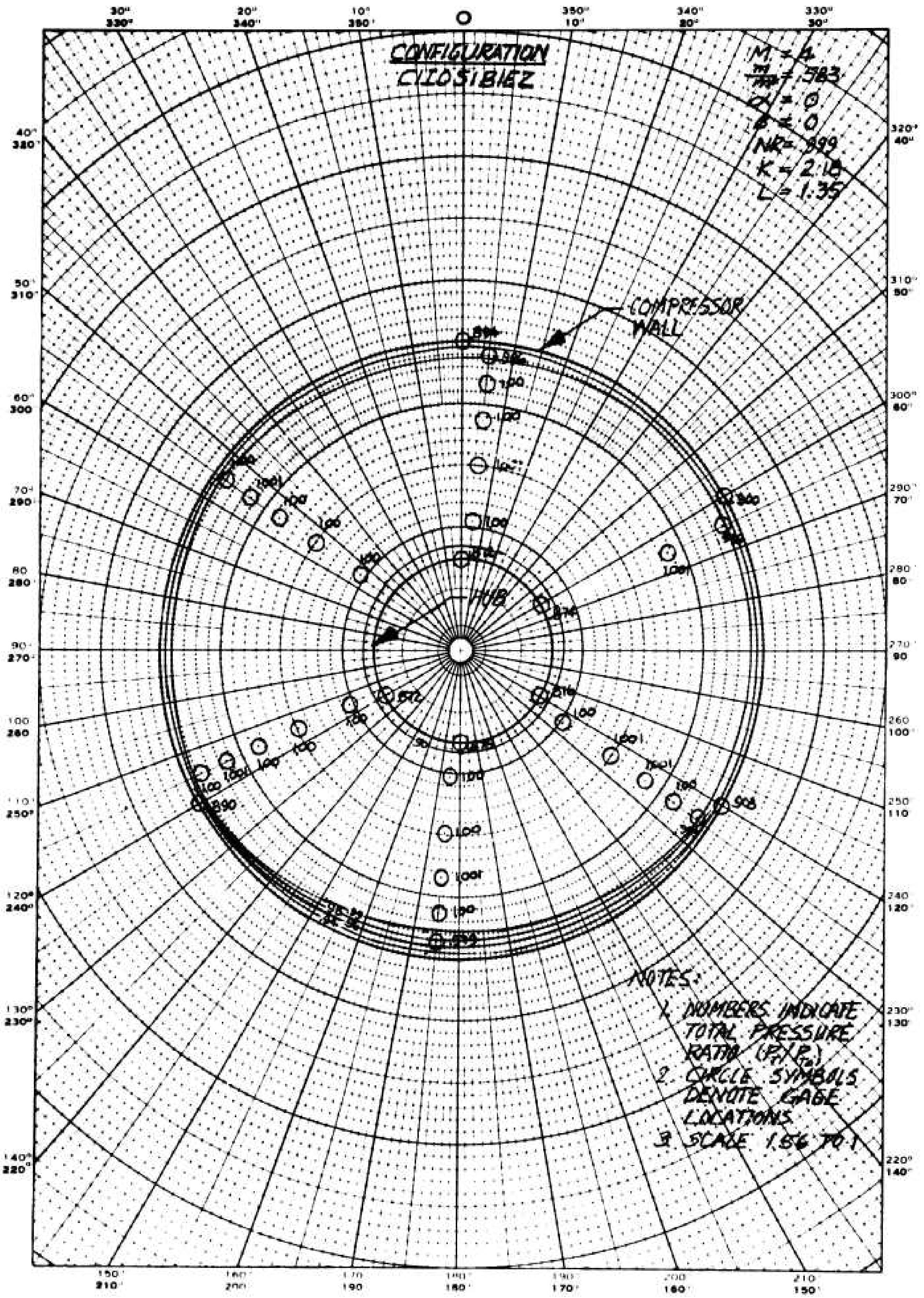

Figure 4-40 Compressor Face Total Pressure Variation, 24E Oval Inlet, Mach No. .4, $\alpha = 0$, $\beta = 0$; $\frac{m}{m^*} = .583$

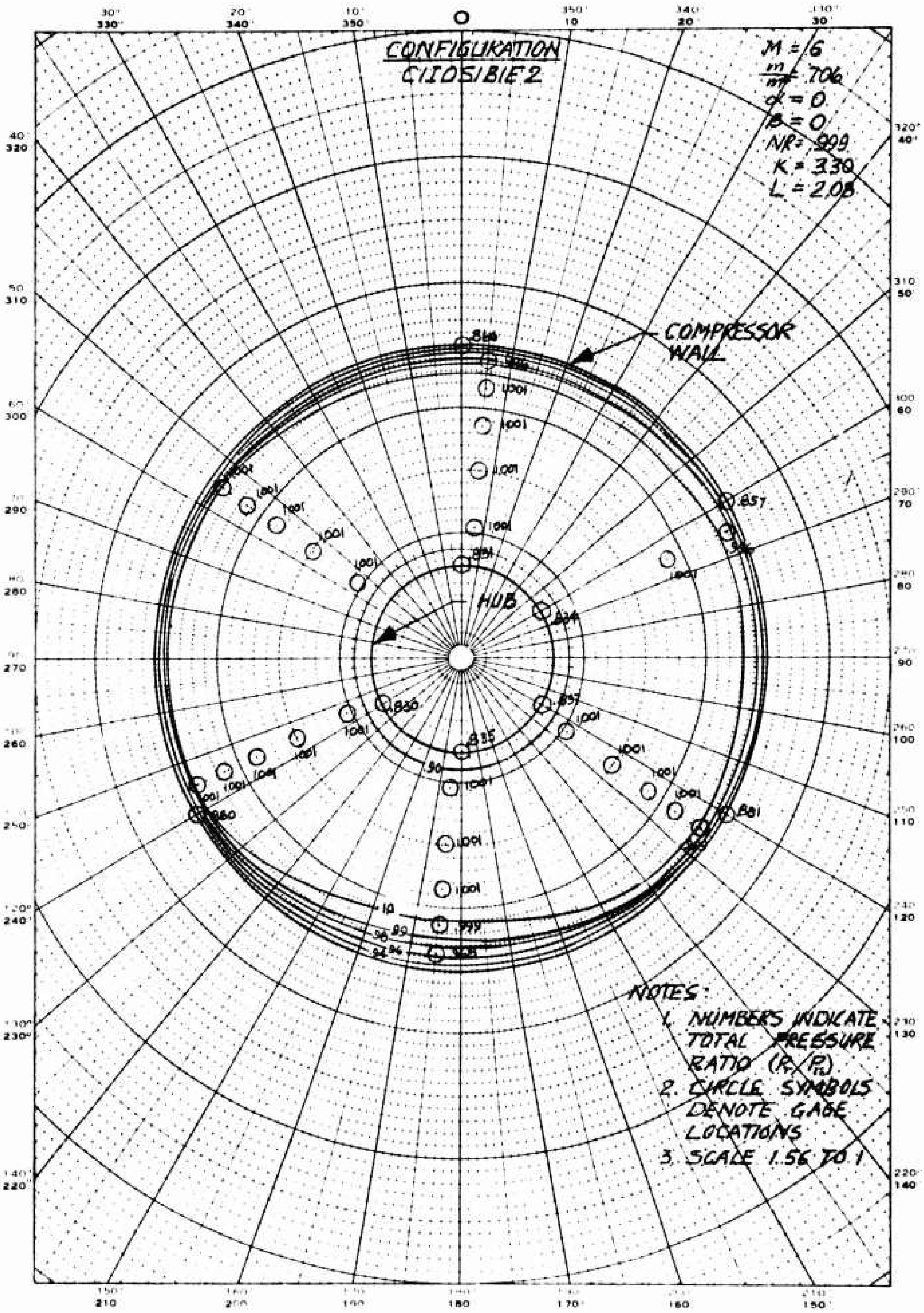

Figure 4-41 Compressor Face Total Pressure Variation, 24E Oval Inlet, Mach No. .6, $\alpha = 0$, $\beta = 0$; $\frac{m}{m^*} = .706$

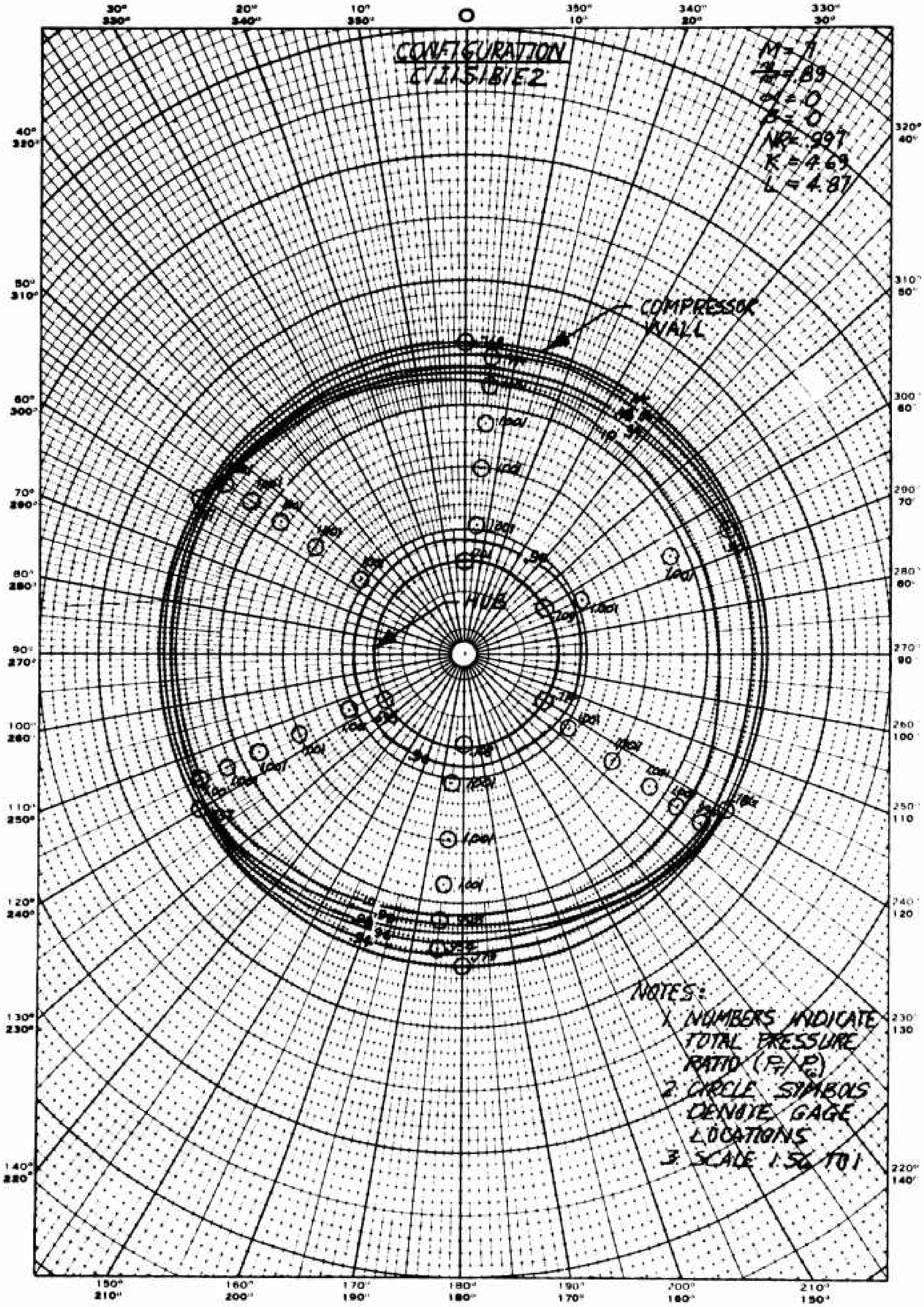

Figure 4-42 Compressor Face Total Pressure Variation, 30E Oval Inlet, Mach No. .7, $\alpha = 0$, $\beta = 0$; $\frac{m}{m^*} = .890$

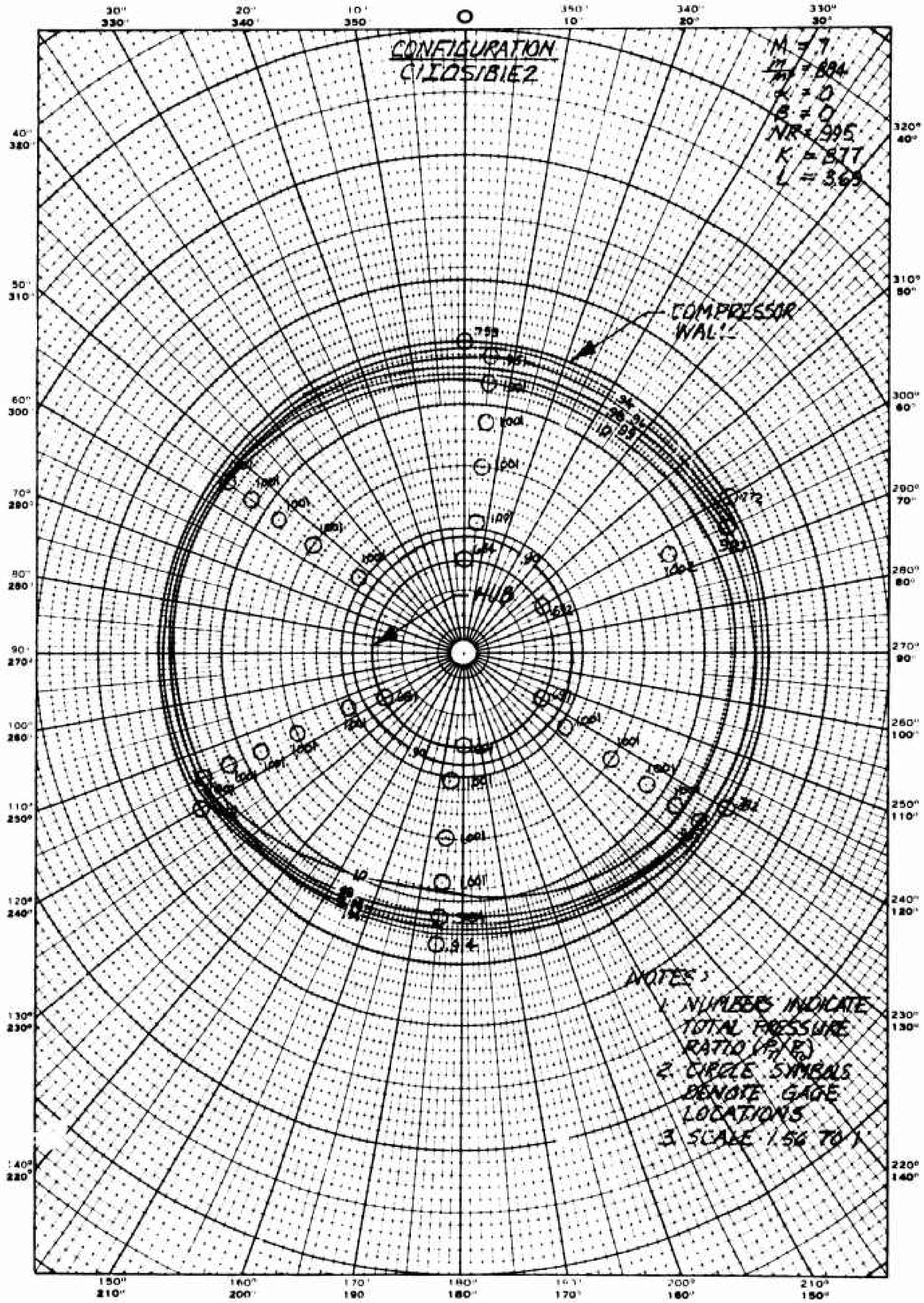

Figure 4-43 Compressor Face Total Pressure Variation, 24E Oval Inlet, Mach No. .7, $\alpha = 0$, $\beta = 0$; $\frac{m}{m^*} = .884$

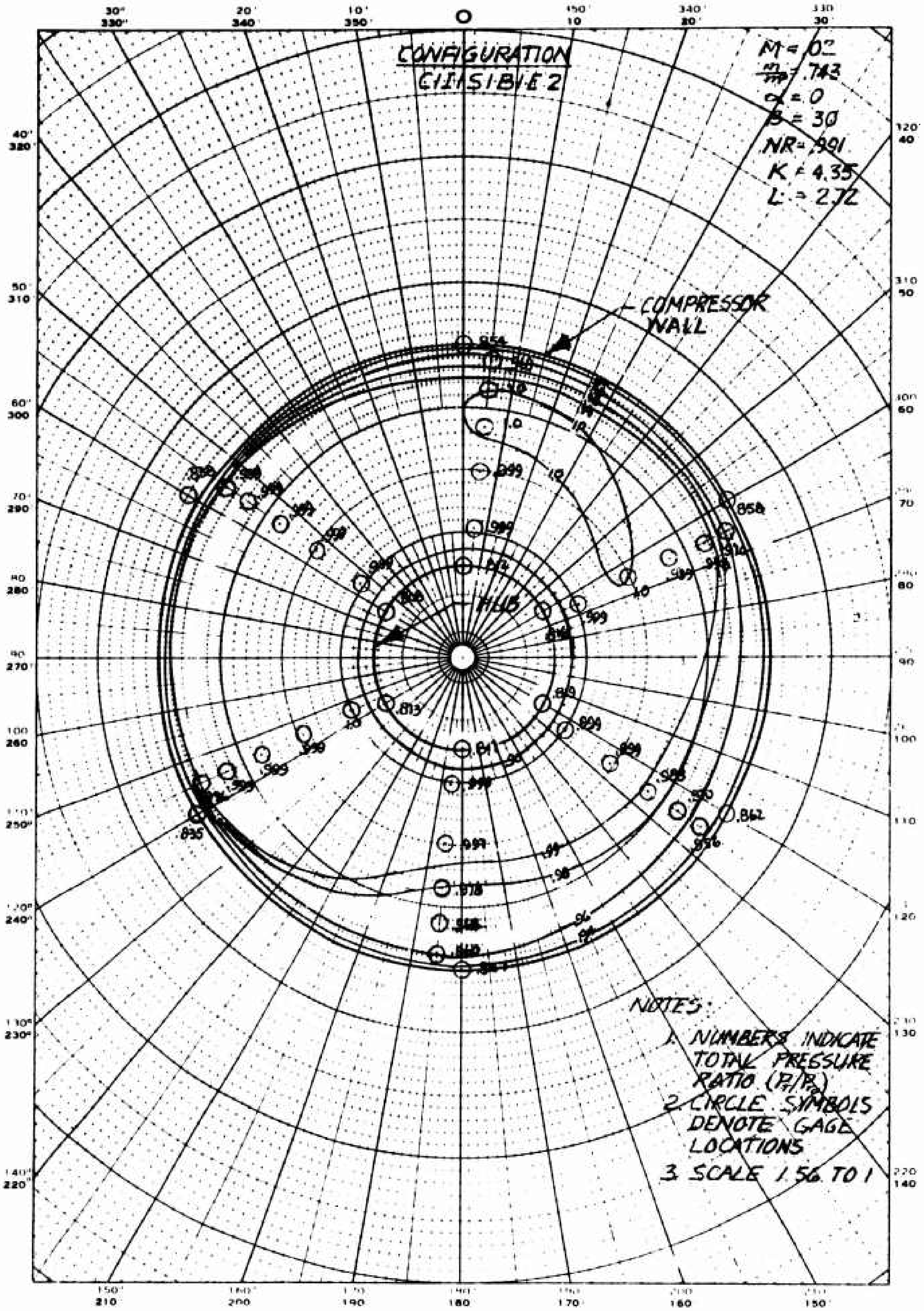

Figure 4-44 Compressor Face Total Pressure Variation, 30E Oval Inlet, Mach No. .02, $\alpha = 0$, $\beta = 30$; $\frac{m}{m^*} = .743$

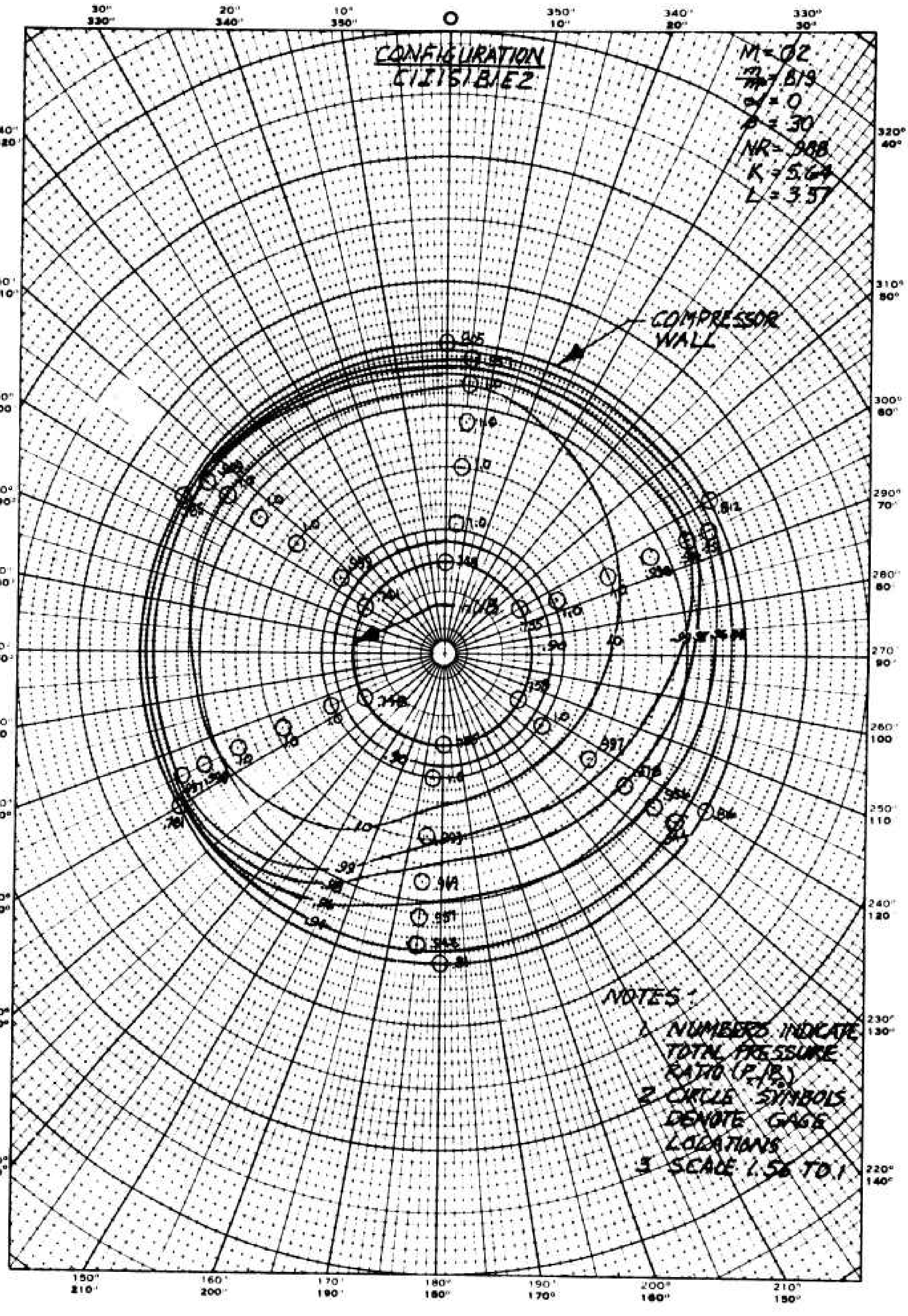

Figure 4-45 Compressor Face Total Pressure Variation, 30E Oval Inlet, Mach No. .02, $\alpha = 0$, $\beta = 30$; $\frac{m}{m^*} = .819$

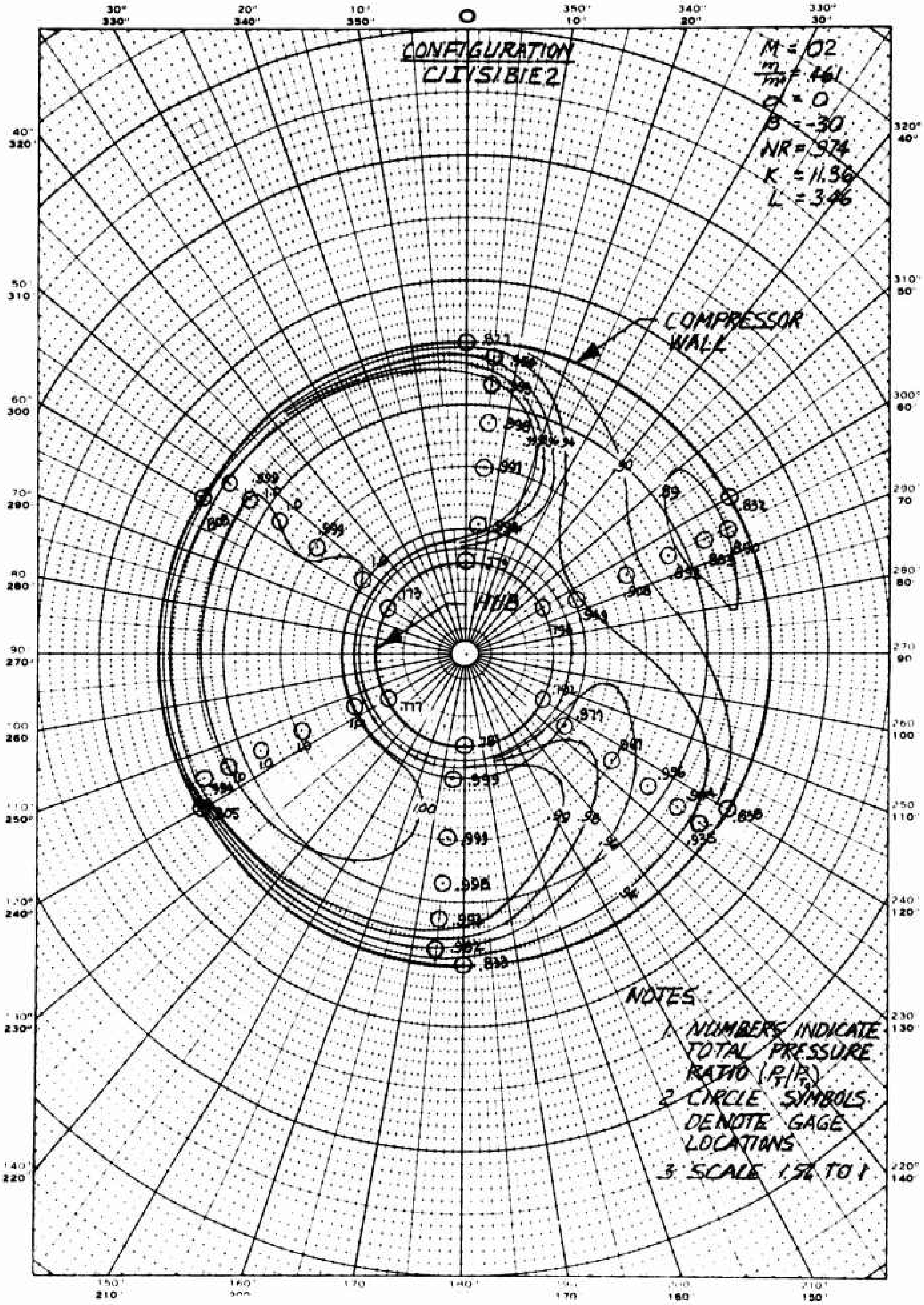

Figure 4-46 Compressor Face Total Pressure Variation, 30E Oval Inlet, Mach No. .02, $\alpha = 0$, $\beta = -30$; $\frac{m}{m^*} = .461$

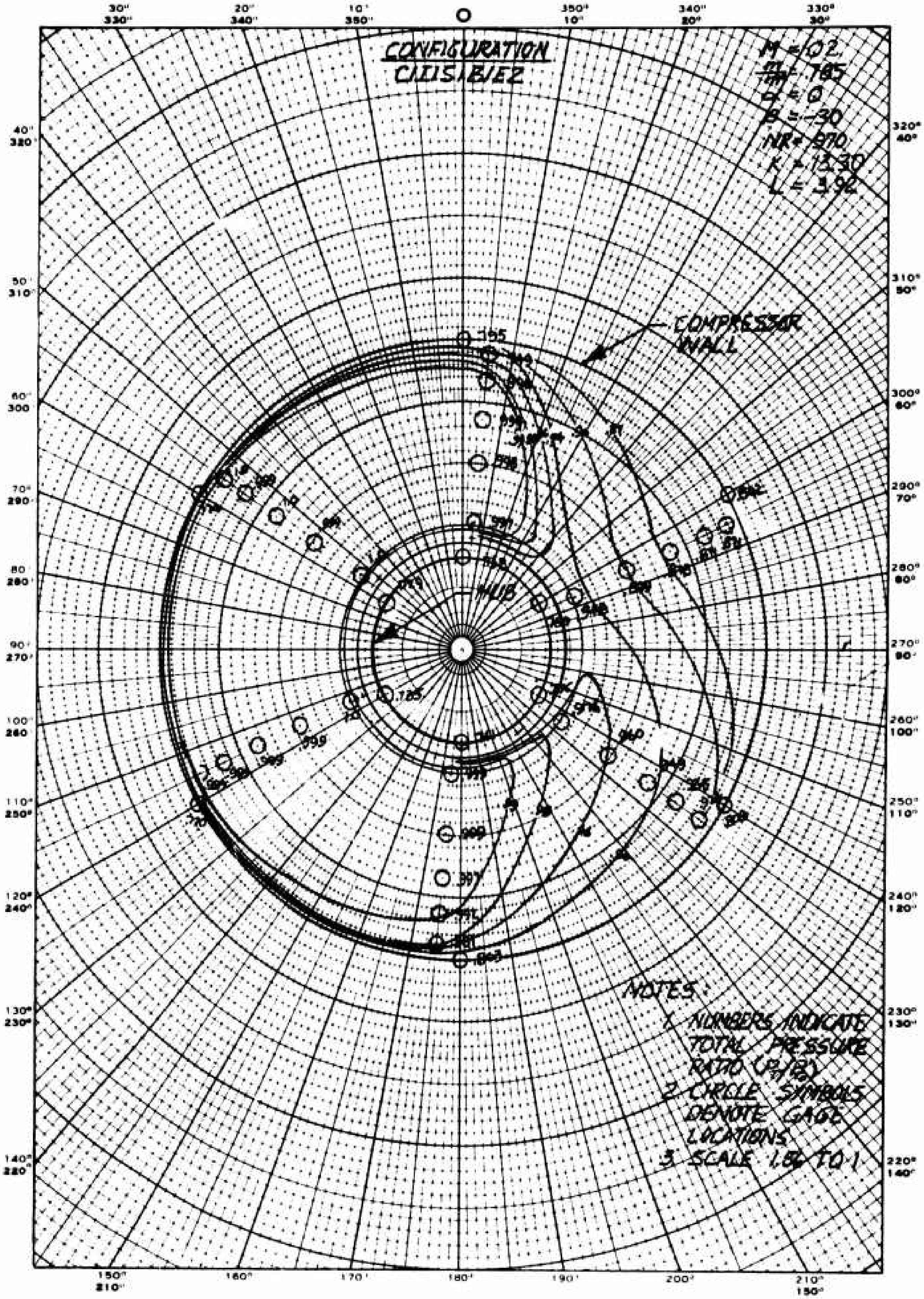

Figure 4-47 Compressor Face Total Pressure Variation, 30E Oval Inlet, Mach No. .02, $\alpha = 0$, $\beta = -30$; $\dfrac{m}{m^*} = .785$

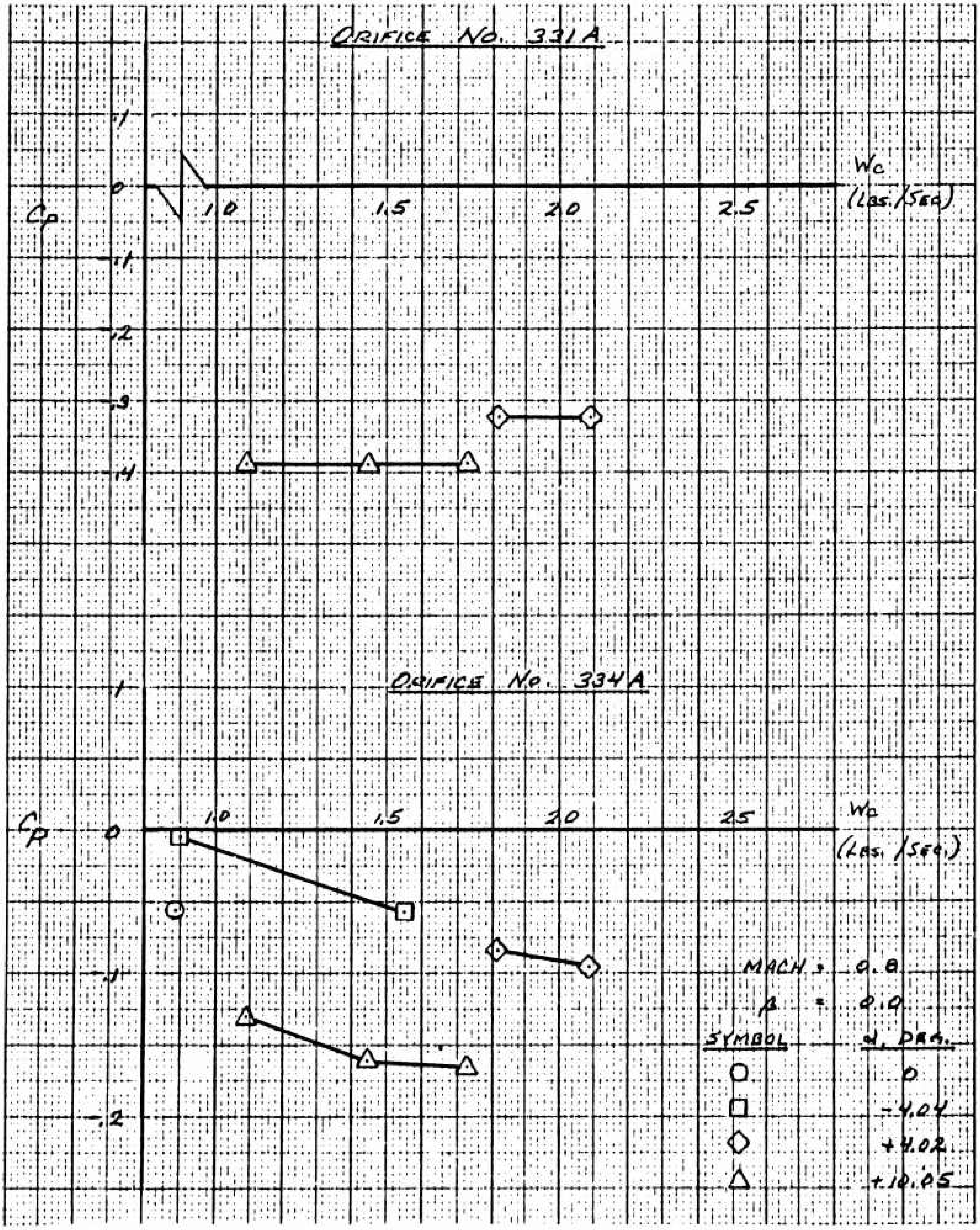

Figure 4-48 Windshield and Canopy Pressure Coefficients vs Model Airflow and Angle of Attack Orifice No's 331A and 334A

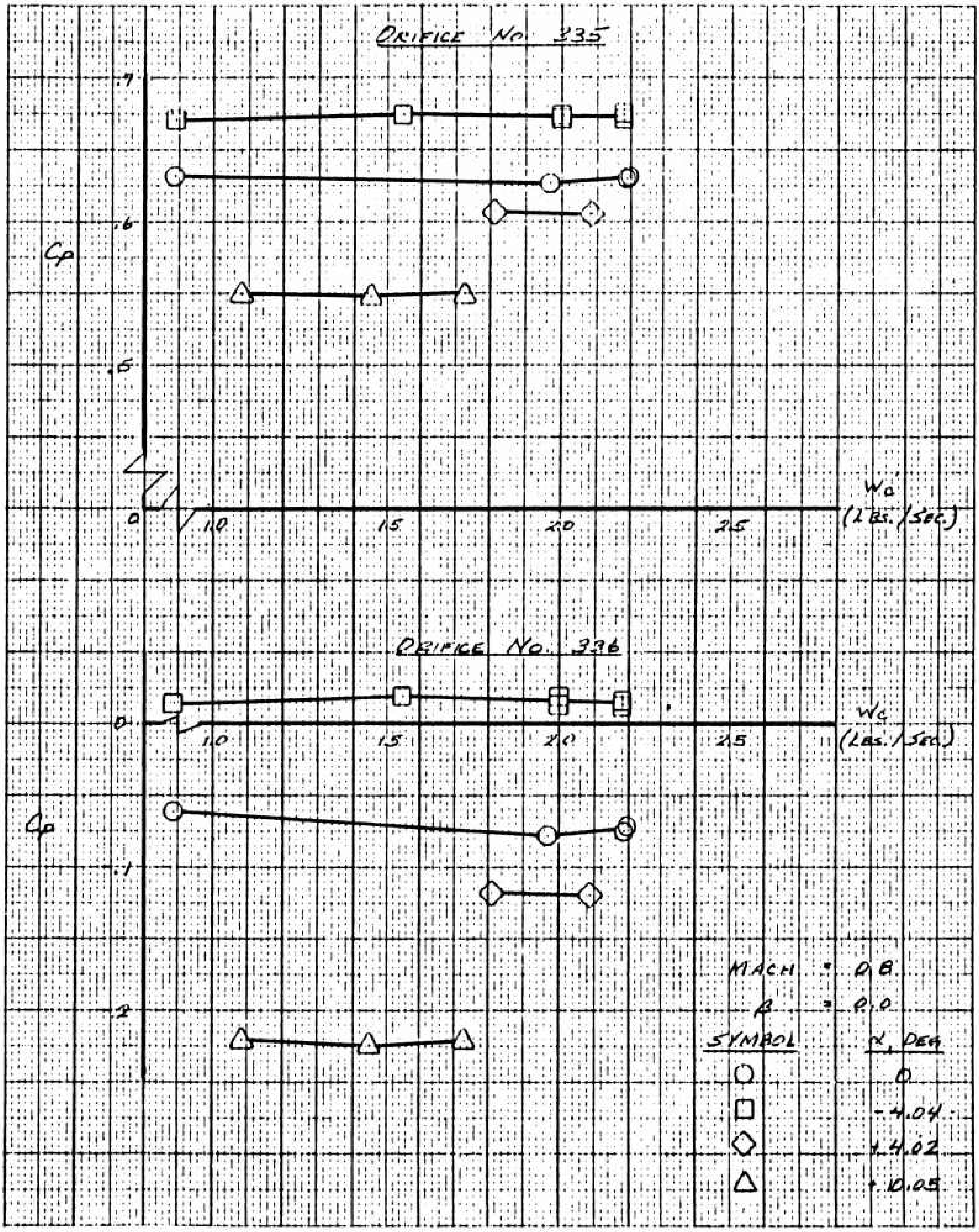

Figure 4-49 Windshield and Canopy Pressure Coefficients vs Model Airflow and Angle of Attack Orifice No's 335 and 336

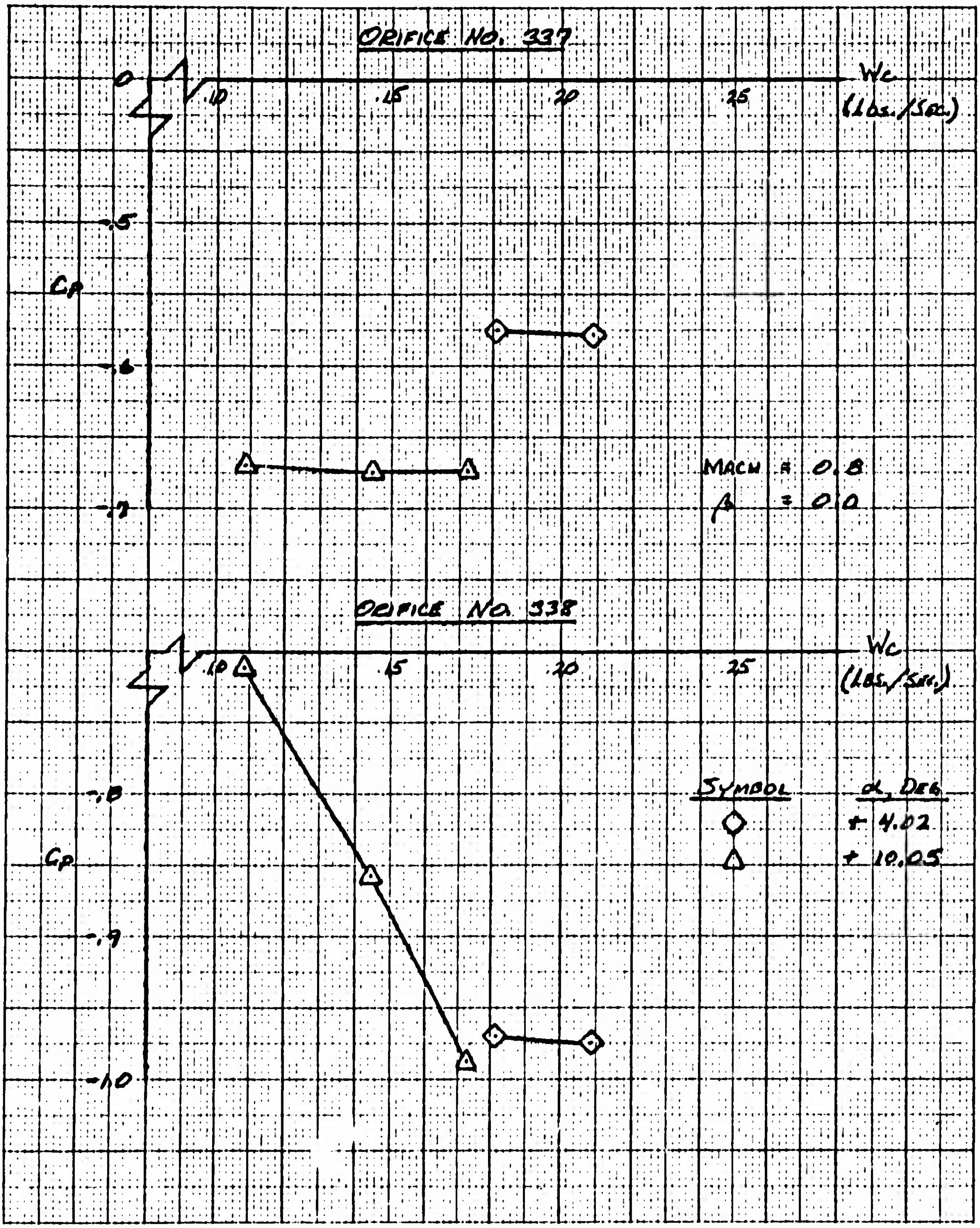

Figure 4-50 Windshield and Canopy Pressure Coefficients vs Model Airflow and Angle of Attack Orifice No's 337 and 338

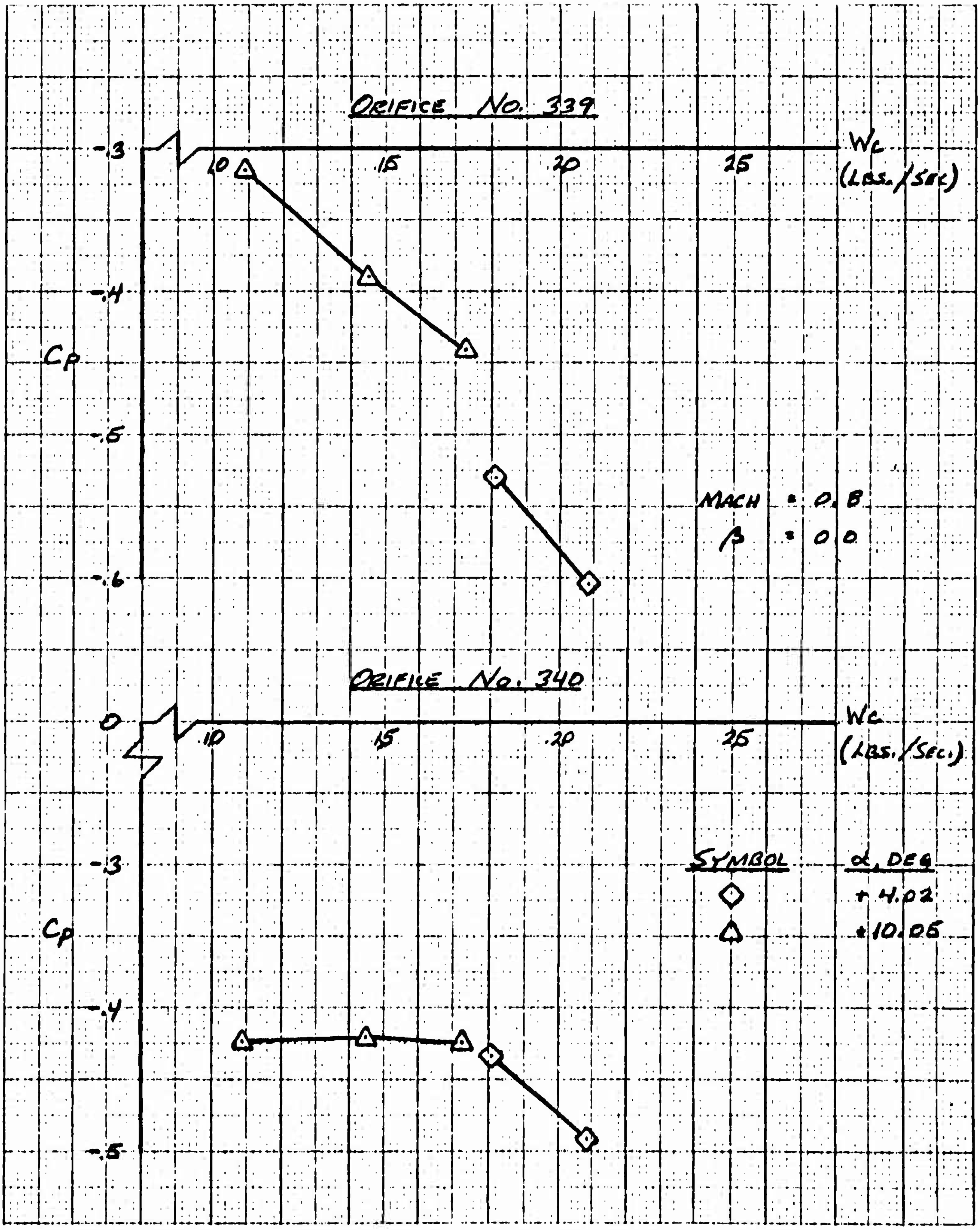

Figure 4-51 Windshield and Canopy Pressure Coefficients vs Model Airflow and Angle of Attack Orifice No's 339 and 340

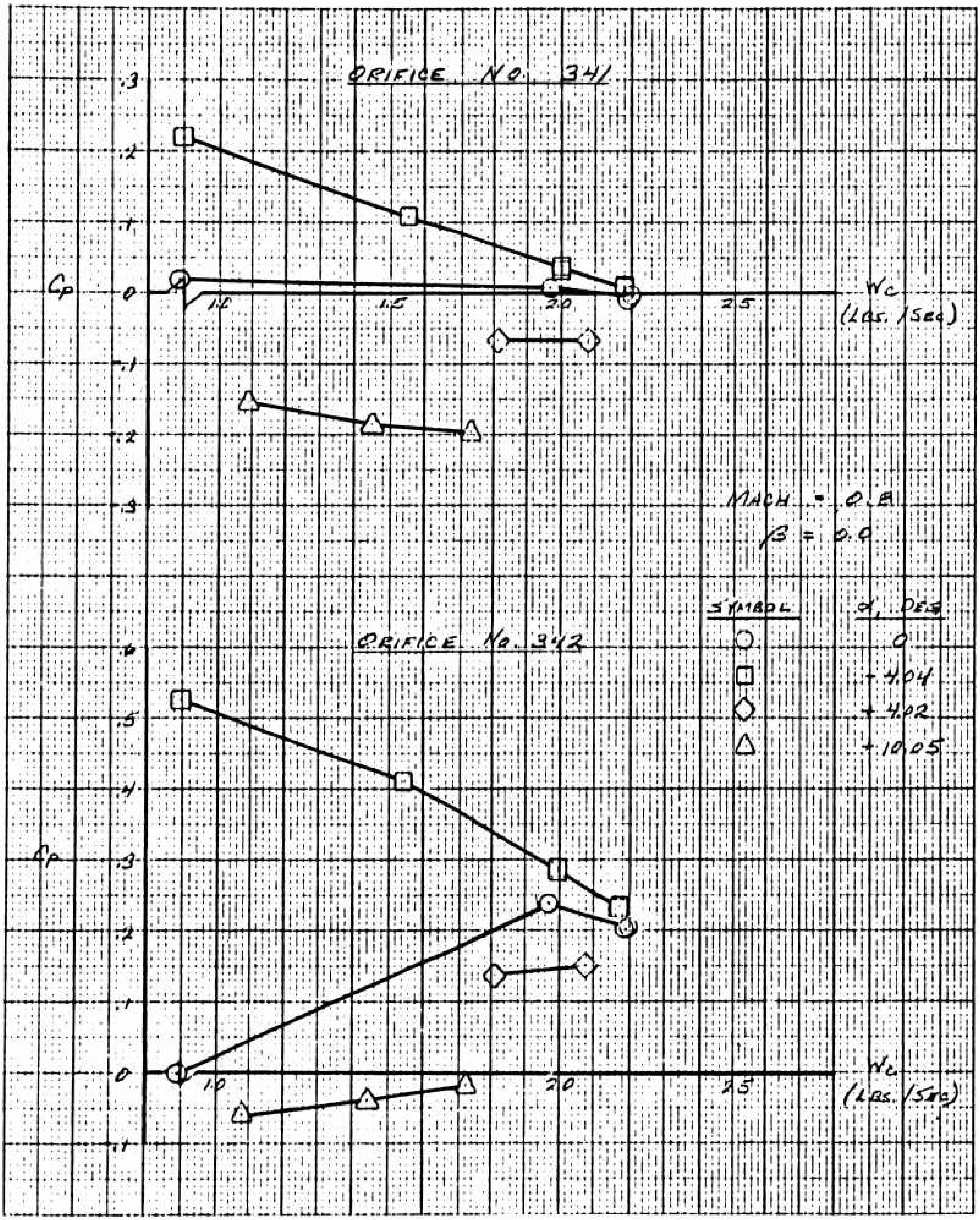

Figure 4-52 Windshield and Canopy Pressure Coefficients vs Model Airflow and Angle of Attack Orifice No's 341 and 342

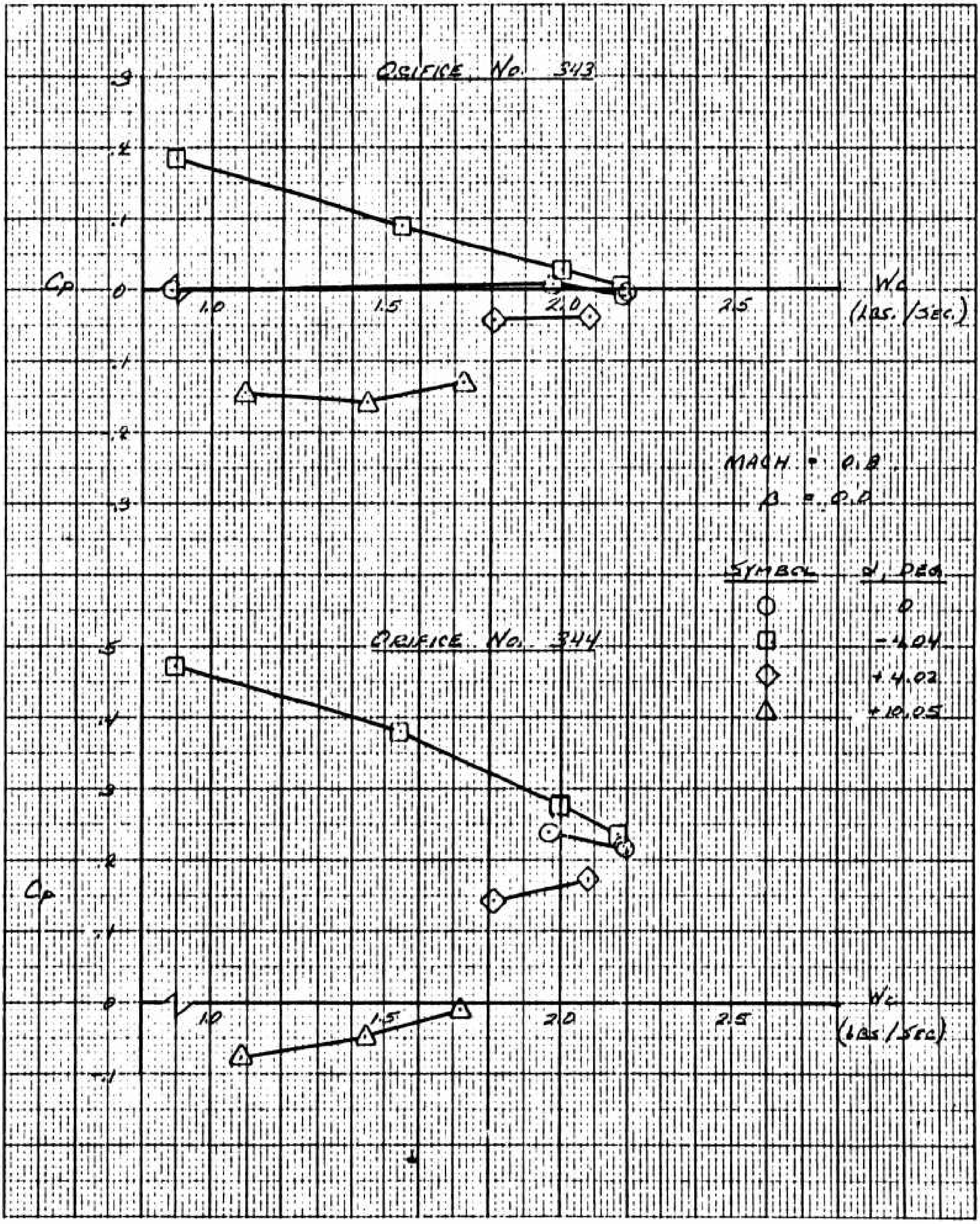

Figure 4-53 Windshield and Canopy Pressure Coefficients vs Model Airflow and Angle of Attack Orifice No's 343 and 344

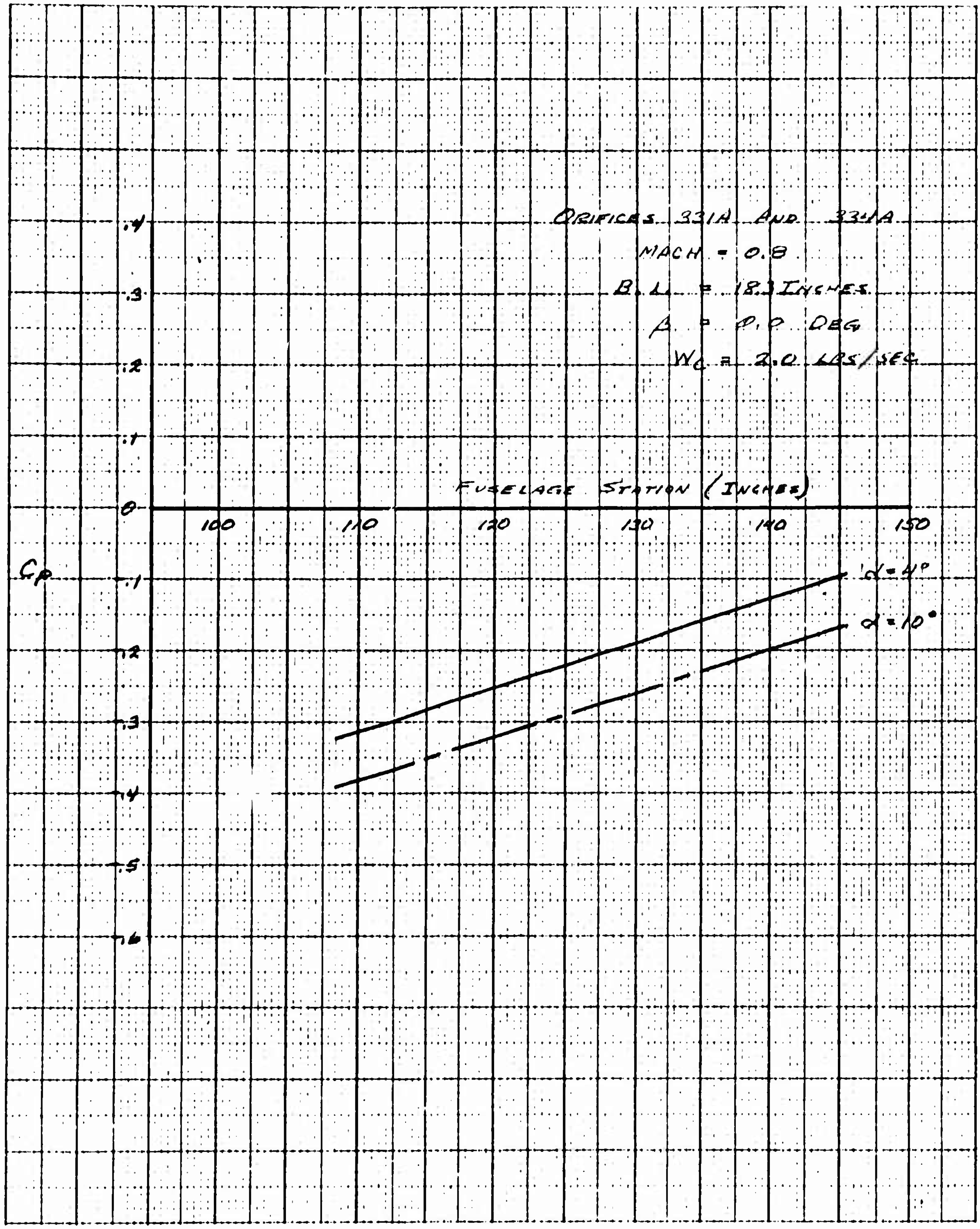

Figure 4-54 Windshield and Canopy Pressure Coefficients vs Fuselage Station and Angle of Attack Orifice No's 331A and 334A

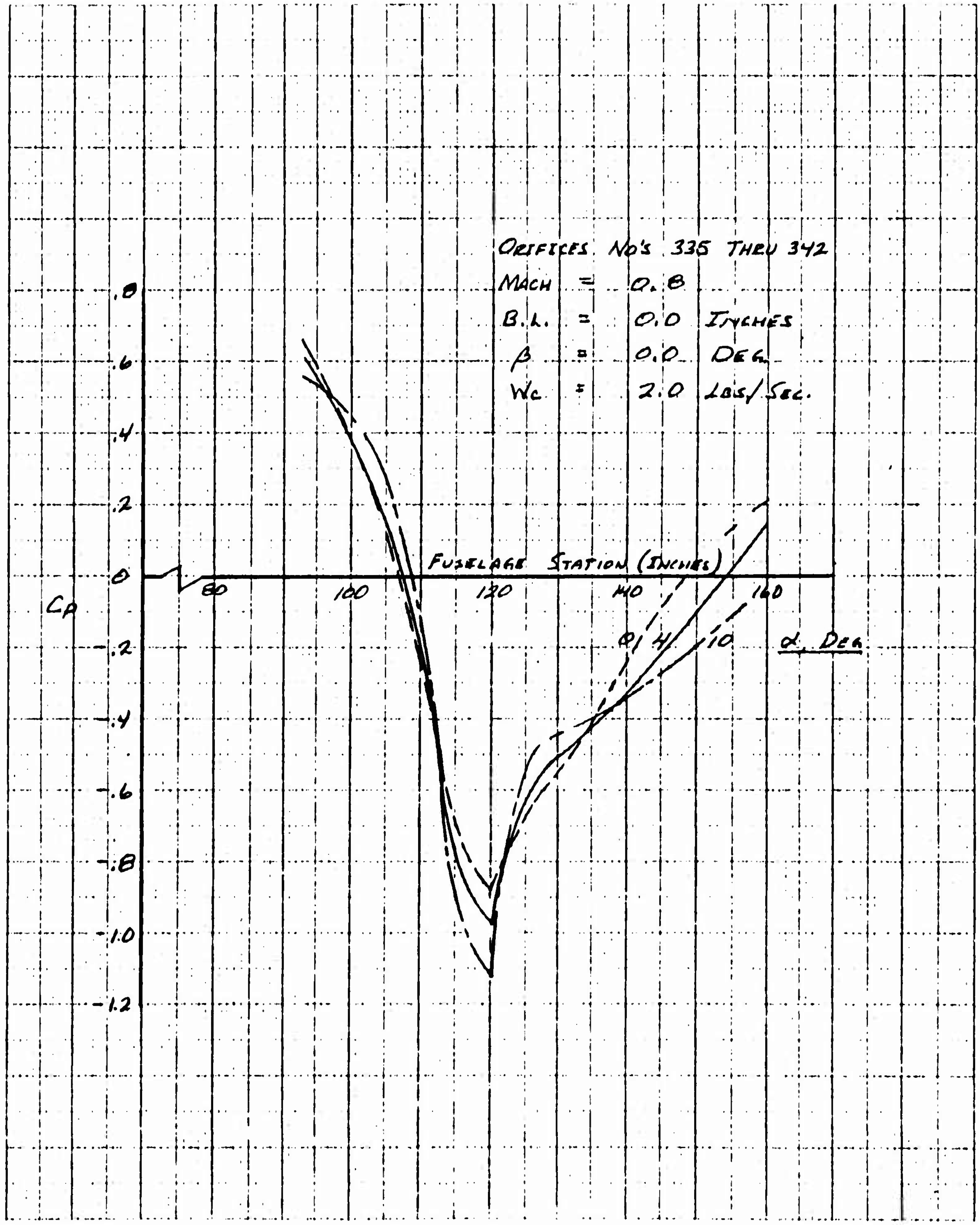

Figure 4-55 Windshield and Canopy Pressure Coefficients vs Fuselage Station and Angle of Attack Orifice No's 335 through 342

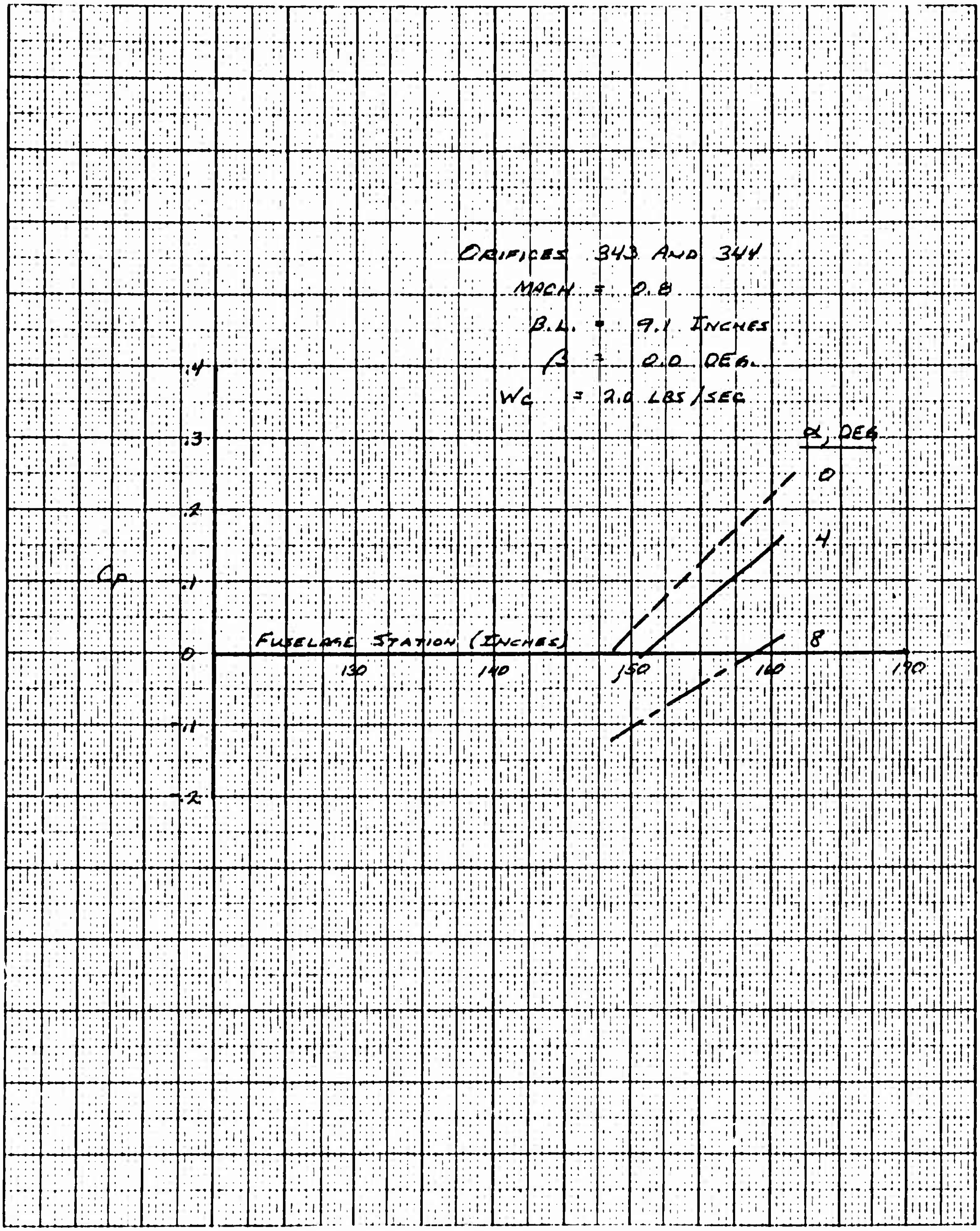

Figure 4-56 Windshield and Canopy Pressure Coefficients vs Fuselage Station and Angle of Attack Orifice No's 343 and 344

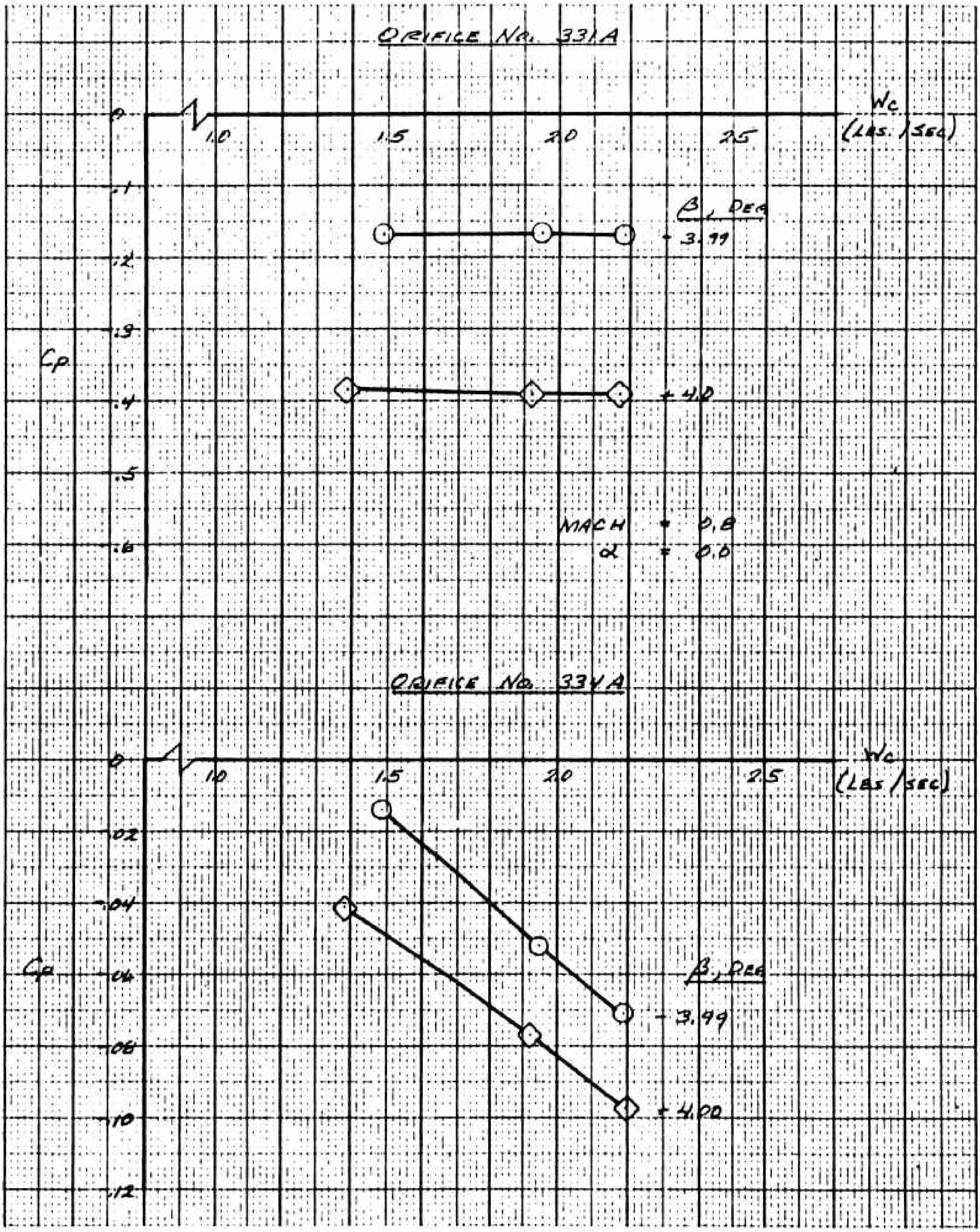

Figure 4-57 Windshield and Canopy Pressure Coefficients vs Model Airflow and Side Slip Angle Orifice No's 331A and 344A

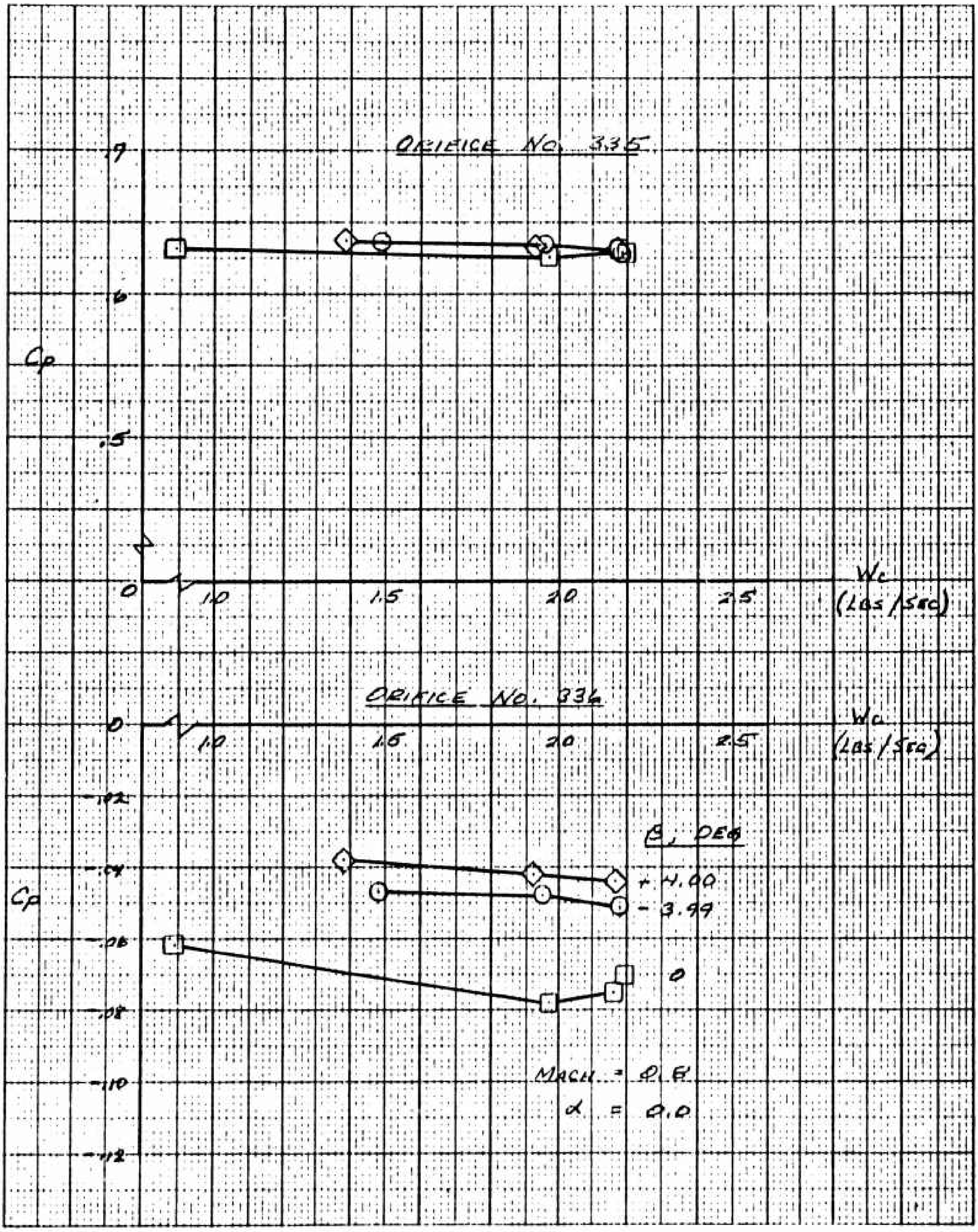

Figure 4-58 Windshield and Canopy Pressure Coefficients vs Model Airflow and Side Slip Angle Orifice No's 335 and 336

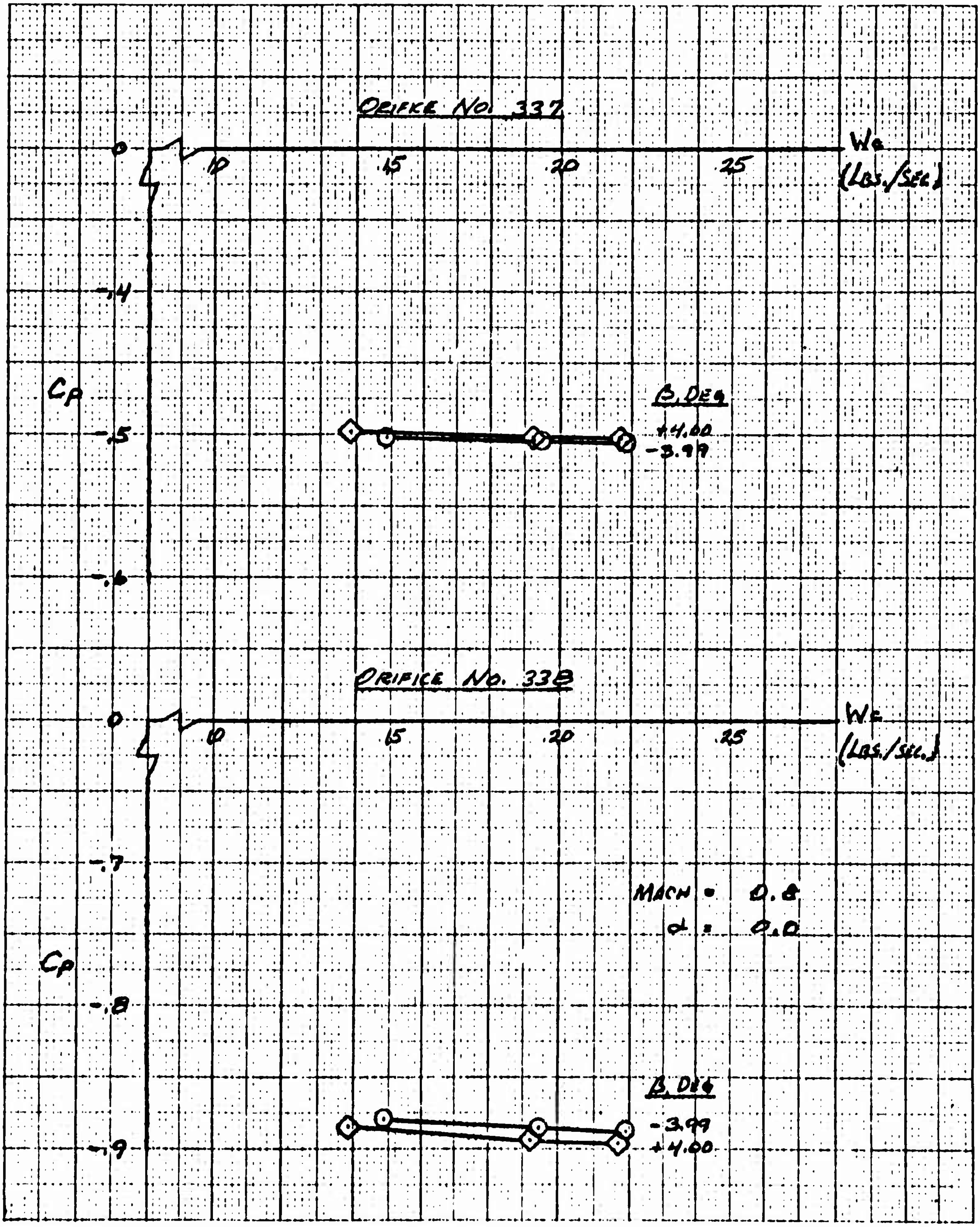

Figure 4-59 Windshield and Canopy Pressure Coefficients vs Model Airflow and Side Slip Angle Orifice No's 337 and 338

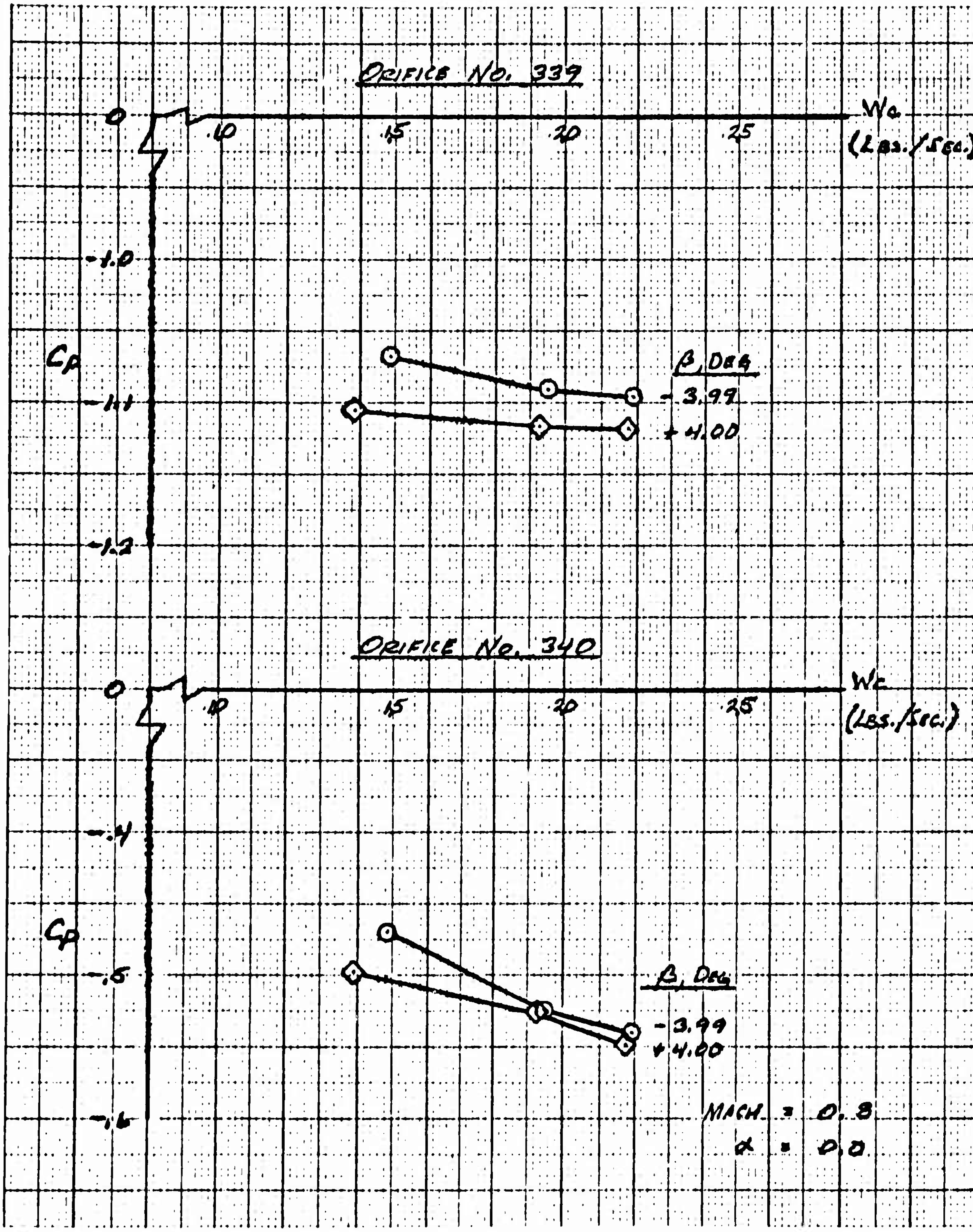

Figure 4-60 Windshield and Canopy Pressure Coefficients vs Model Airflow and Side Slip Angle Orifice No's 339 and 340